

UNDERSTANDING FIRM-LEVEL ENTREPRENEURSHIP:
A STUDY OF EXPLORING THE CONSTRUCT
AND ITS RELATIONSHIP WITH CONTEXTUAL FACTORS

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AND ITS RELATIONSHIP WITH CONTEXTUAL FACTORS

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Understanding Firm-Level Entrepreneurship:
A Study of Exploring the Construct
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DISSERTATION ABSTRACT

Deniz Kantur, "Understanding Firm-Level Entrepreneurship: A Study of Exploring the Construct and its Relationship with Contextual Factors"

The aim of this research is to understand firm-level entrepreneurship and explain its relationships with organizational culture, top management leadership, and organizational performance. The study adopts both qualitative and quantitative research methods.

In the qualitative research, four case studies were conducted. The findings show that there are two different types of entrepreneurial activities in organizations - beyond-boundary focus and within-boundary focus - and their relationships with organizational factors - top management leadership, strategic orientation, organizational culture, and internal mechanisms - show different patterns.

In quantitative research, data is collected from 324 respondents in 118 companies. The results show that entrepreneurial posture and activities are two different constructs of firm-level entrepreneurship where posture affects two types of entrepreneurial activities - innovation/venturing and organizational renewal. Flexibility-oriented top management leadership is found to be an important predictor of entrepreneurial posture while hierarchy culture also has a significant positive effect. Organizational renewal activities are found to be influencing both financial and qualitative performance while such a relationship is not established for innovation/venturing activities.

In conclusion, results suggest that there are different types of entrepreneurial activities in organizations. Top management leadership might directly or indirectly -through influencing strategic orientation, organizational culture, and internal mechanisms- affect firm-level entrepreneurship. The effect of entrepreneurial activities on organizational performance depends on which activity is focused on and on how organizational performance is defined.

TEZİN ÖZETİ

Deniz Kantur, “Örgütsel Girişimcilik: Kavramın Anlamlandırılması ve Örgütsel Etkenler ile Olan İlişkisi Üzerine Bir Çalışma ”

Bu tezin amacı, örgütsel girişimcilik kavramını ve kavramın örgüt kültürü, tepe yönetimi liderliği ve örgüt performansı ile olan ilişkilerini anlamaktır. Araştırmada, nitel ve nicel yöntemler birlikte kullanılmıştır.

Nitel araştırma kapsamında, dört kurumla vaka analizi yapılmıştır. Araştırma sonucunda, örgütlerde iki tip örgütsel girişimcilik faaliyetinin - örgüt sınırları ötesinde faaliyetler ve örgüt sınırları dahilinde faaliyet - olduğu görülmüştür. Bu iki farklı örgütsel girişimcilik faaliyetlerinin, nitel araştırma sonunda belirlenen örgütsel etkenlerle - tepe yönetimi liderliği, stratejik eğilim, örgüt kültürü, içsel mekanizmalar ve performans - farklı ilişkiler gösterdiği görülmüştür.

Nicel araştırma kapsamında 118 kurumda toplam 324 kişiden anket toplanmıştır. Nicel araştırmanın sonucunda, girişimcilik eğilimi ve faaliyetlerinin örgütsel girişimcilik seviyesinde ayrı kavramlar olduğu, eğilimin faaliyeti etkilediği ve örgütlerde iki tip girişimcilik faaliyetinin - yenilik/teşebbüs ve örgütsel yenilenme- olduğu görülmüştür. Esnekliğe önem veren tepe yönetim liderliği girişimcilik eğilimini etkileyen en önemli etken olarak bulunurken, hiyerarşik kültürün de kavramı pozitif yönde etkilediği görülmüştür. Örgütsel yenilenme hem finansal hem nitel performansı pozitif yönde etkilerken, yenilik/teşebbüs faaliyetleri için böyle bir ilişki kurulamamıştır.

Sonuçta bulgulara göre, örgütlerde farklı tip girişimcilik faaliyetlerinin olduğu görülmüştür. Tepe yönetimi liderliğinin örgütsel girişimciliği, direkt veya örgütün stratejik eğilimini, kültürünü ve içsel mekanizmalarını etkilemek yoluyla endirekt olarak etkilediği görülmüştür. Örgütsel girişimciliğin performans üzerindeki etkisi ise hangi girişimcilik faaliyetine odaklanıldığına ve performansın nasıl tanımlandığına göre değişmektedir.

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To my mother

Ziynet Seyhan,

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CHAPTER I

INTRODUCTION

In today's competitive business environment, companies are striving for differentiating themselves from others in order to create greater value for their customers and to excel in the crowded marketplace. The developments in information and communication technologies and also in the transportation industry have made it easier for companies to access any kind of information. These developments even enable small enterprises to compete with large conglomerates in the global arena. In such a fierce competition, organizations are forced to innovate continuously and engage in entrepreneurial activities in order to keep up with the speed of the business environment. Rigidity, risk aversion, and lethargy accentuated by mechanistic organizations impede the development of entrepreneurial activities and therefore would not be considered a good fit for the current competitive conditions. As a result, entrepreneurial organizations which are change-oriented and which favor risk-taking and value continuous innovation are recently gaining greater popularity.

In this environment, corporate entrepreneurship which refers to entrepreneurship inside the organization (Pinchott, 1985) is gaining an increasing importance. From a scholarly point of view, it can be said that the field of

corporate entrepreneurship has not reached saturation yet since there is still a lack of consensus on what the term actually means (Covin & Miles, 1999; Guth & Ginsberg, 1990). There is also a gap in the literature regarding the proper refinement of the construct and clear distinctions between actual behaviors, orientations, or attitudes (Zahra, Jennings & Kuratko, 1999). Additionally, its relationships with other organizational conduct variables are underdeveloped (Zahra et al., 1999).

Considering this, current study aims to develop a more thorough understanding of firm-level entrepreneurship in relation to organizational culture, leadership, and organizational performance. Organizational culture is a crucial element of the organizational environment favoring firm-level entrepreneurship. Entrepreneurial culture creates the perception among employees that innovation is an expected and effective activity providing general guidelines for its conduct encapsulated within these cultural norms and, in turn, the entrepreneurial behavior of employees creates the innovations that validate these beliefs and norms (Russell, 1999; p.10). Awareness of the importance of culture as a correlate of firm-level entrepreneurship is essential for cultural change supporting entrepreneurial initiatives. Leadership is another crucial factor promoting entrepreneurial inclination in organizations (Guth & Ginsberg, 1990). Leaders create an organizational atmosphere where entrepreneurship is given priority and where entrepreneurial activities are highly appreciated and promoted. Companies engage in entrepreneurial activities with an aim to have positive organizational outcomes such as improved performance. Therefore, the effect of entrepreneurial activities

on the organizational performance indicators is an especially important concern for companies.

Thus, this research attempts to make two primary contributions to the field of firm-level entrepreneurship. First, it aims to add to the literature by clarifying firm-level entrepreneurship through differentiating between entrepreneurial orientation and entrepreneurial activities. Second, it attempts to examine the relationship between firm-level entrepreneurship and its organizational level correlates - organizational culture, leadership, and organizational performance. This research adopts both qualitative and quantitative methods to better understand the firm-level entrepreneurship process. In a review of firm-level entrepreneurship literature Zahra et al. (1999) stated that the combination of qualitative and quantitative methodologies enables researchers to develop a more accurate understanding of firm-level entrepreneurship with its organizational level correlates.

In Chapter II, the literature on firm-level entrepreneurship and the literature on organizational culture, leadership, and organizational performance are reviewed. In Chapter III, the literature that relates firm-level entrepreneurship to organizational culture, leadership, and organizational performance is reviewed and the preliminary theoretical framework of the study is developed. Methodology adopted in the research is presented in the same chapter. Chapter IV presents the qualitative research in which research design, data collection, data analysis, results, and discussion on findings are detailed. Chapter V presents the quantitative research in which the conceptual model and hypotheses, research design, analysis,

and discussion of findings are presented. In Chapter VI, the findings on qualitative and quantitative research are discussed and the revised theoretical framework of the research is presented. Finally, Chapter VII includes implications to theory, implications to practice, limitations, and conclusion.

CHAPTER II

LITERATURE REVIEW

In this chapter, the literature review of the study is presented in three sections. In the first section, the literature on entrepreneurship is reviewed succinctly in relation to firm-level entrepreneurship. The next section follows with the review of firm-level entrepreneurship field. In the last section, the literature on organizational culture, leadership, and organizational performance is reviewed.

Entrepreneurship

The turbulent business environment of today requires companies to sustain their competitive advantage and have superior organizational performance. The source of competitive advantage and performance differences in companies is a focal point of discussion in strategic management literature and there are two major views on the phenomenon (McGahan & Porter, 1997). First view involves perspectives that are rooted in industrial organization theory (i.e., competitive advantage, Porter, 1979) which suggest that the industry conditions are important determinants of organizational performance. For instance, Porter's (1979) study developed five forces in industry: threat of new entrants, bargaining power of suppliers, threat of

substitute products or services, bargaining power of buyers, and the rivalry among existing competitors. The typology emphasized that it is the industry that determines the competition and the profitability of the companies (Porter, 2008).

Second is resource-based view, which suggests that the organizational processes determine the performance. The essence of competitive advantage in resource-based view of the firm is the resources or the competences (i.e., the skills, the organizational culture) the organization possesses (Conner, 1991). Accordingly, the resource-based view concentrates more on the firm (Porter, 1991). While resources are important source of competitive advantage for companies, how these resources are utilized is important. Especially in an entrepreneurial context, the importance is more on the exploitation of resources (Newbert, Gopalakrishnan & Kirchhoff, 2008) and therefore the competencies that the company needs for this exploitation. Competence-based theory of the firm, as an extension of resource-based view, emphasizes the importance of making use of resource endowments in a market- and goal-oriented way (Freiling, 2004). According to Prahalad and Hamel (1990), competences enable companies to have access to various markets, make major contributions to the company's products and are difficult for others to replicate. As Baden-Fuller (1995) suggested competence-based theory of the firm is more associated with "competition as innovation" where the companies compete on the basis of competencies and capabilities they possess, not on the basis of dominating or positioning. Freiling (2004) suggested that competence-based view emphasizes destruction of current market situations and therefore close to Schumpeterian thinking of "creative destruction" (Schumpeter, 1934).

The link between strategy management and the economics of Schumpeter is established through the concept of innovation (Parnell, 2007). Schumpeter attributes improved performance to the innovation that occurs in the organization. According to Schumpeter's perspective, innovation is "implementation of changes to the status quo that destroy the old and create the new" (Parnell, 2007, p. 122). Schumpeter (1934) distinguished between five types of innovation: new production process, new products, new materials or resources, new markets, and new forms of organization and the essence of his theory is "creative destruction". According to Schumpeter, innovation occurs through the process of creative destruction where the entrepreneur intentionally destroys the old through recombination into new form. All innovations are not disruptive, the extent, timing, and the impact of innovation determine whether it is disruptive or not (Carayannis, Ziemnowicz & Spillan, 2007).

In Schumpeter's perspective "entrepreneurship occurs through innovation" and it refers to recombination of existing resources and therefore it is not the discovery of new products or services (Parnell, 2007, p. 122). The term entrepreneurship has its roots from the French term "entrepreneur" which also comes from the term "enterprise" that has a German equivalent meaning of "to undertake" (Luchsinger & Bagby, 1987; p. 10). The concept has been applied to different levels, such as individuals, groups, or the whole organization (Lumpkin & Dess, 1996). At the individual level, an entrepreneur establishes, organizes and manages the new organization, assumes the whole risk, and, as Schumpeter adds, all these involve novelty and innovation (Luchsinger & Bagby, 1987). In other

words, entrepreneurship refers to innovation usually in the form of a new venture through novelty in products/services or processes.

Current study focuses on entrepreneurship at the organization level, where entrepreneurial activity occurs in an established organizational setting. At the organizational level, such an initiative takes place in an already established organization. In a special issue of *Corporate Entrepreneurship in Strategic Management Journal*, Guth and Ginsberg (1990) associate entrepreneurship with the identification of opportunity and exploitation of it through different resource combinations.

Firm-level of analysis is selected for refinement of the firm-level entrepreneurship concept and exploration of its relationships with organizational level conduct variables. Since theory development in corporate entrepreneurship research is in its early stages of development (Guth & Ginsberg, 1990), “entrepreneurship” is used to reflect initiatives at the individual level but there are definitional ambiguities at the firm-level (Sharma & Chrisman, 1999); and this situation impedes the development of knowledge and expansion of the field. Therefore, the clarification of the term in the current study aims to contribute to the proper understanding of the entrepreneurial process at the firm level.

Entrepreneurship gained its legitimacy as an academic field, observed from the fact that there are several academic journals such as *Entrepreneurship Theory and Practice* and that there appears increased number of studies in mainstream journals (Stevenson & Jarillo, 1990). Shane and Venkataraman (2000) developed a framework for the study of entrepreneurship which is composed of three basic

research areas: the existence of entrepreneurial opportunities, the discovery and exploitation of opportunities, and the modes of exploitation. Stevenson and Jarillo (1990) also identified three main research streams in the field. First stream concentrates on the outcomes of entrepreneurship and is dominated by economists. Researchers with this approach basically concentrate on the consequences of entrepreneurship and their main focus is innovation. The second stream concentrates on causes of entrepreneurship and drives its roots from psychology and sociology fields. These studies investigate the entrepreneurial behavior that ends up with the establishment of a new venture. Lastly, the third stream concentrates on entrepreneurial management and tries to answer the question of how entrepreneurs act. This research stream recognizes that, in addition to the individuals, there are other important variables affecting the emergence of entrepreneurial event as well (i.e., management) (Stevenson & Jarillo, 1990). Such recognition creates the awareness that there exist organizational factors that contribute to entrepreneurship. This understanding shifts the focus from the initial set-up of a new business to the on-going entrepreneurial activities in an already established firm. Stevenson and Jarillo (1990) concluded that corporate entrepreneurship, as a species of entrepreneurship, is more than internal venturing. According to the authors, adopting an opportunity-based definition of entrepreneurship, where opportunities are pursued by individuals whether on their own or inside an organization, clear the link between the fields of corporate entrepreneurship and entrepreneurship and the latter research benefits the former.

While entrepreneurship field gained a legitimate status in the academia,

there is still a lack of consistency in the terminology or the methods used, there are uneven developmental patterns and there is comparative isolation from significant other related areas (Brazeal & Herbert, 1999). With the aim to identify research areas for the fields to benefit from each other, Herron, Sapienza, and Smith-Cook (1991, 1992) studied the links between entrepreneurship and psychology, sociology, anthropology, economics as well as organizational behavior, marketing, finance, and strategic management.

Brazeal and Herbert (1999), in analyzing the genesis of entrepreneurship, stated that the concepts of innovation, change, and creativity are largely ignored by the entrepreneurship research and vice versa, which cause unproductive fragmentation of the field. The considerable amount of emphasis given to delineation of basic parameters in the field with the analysis of fundamental relationships, processes, and causality inhibit the field's potential relationships with other broader concepts such as innovation (Brazeal & Herbert, 1999). Accordingly, authors relate these concepts in a simple model (Fig. 1).

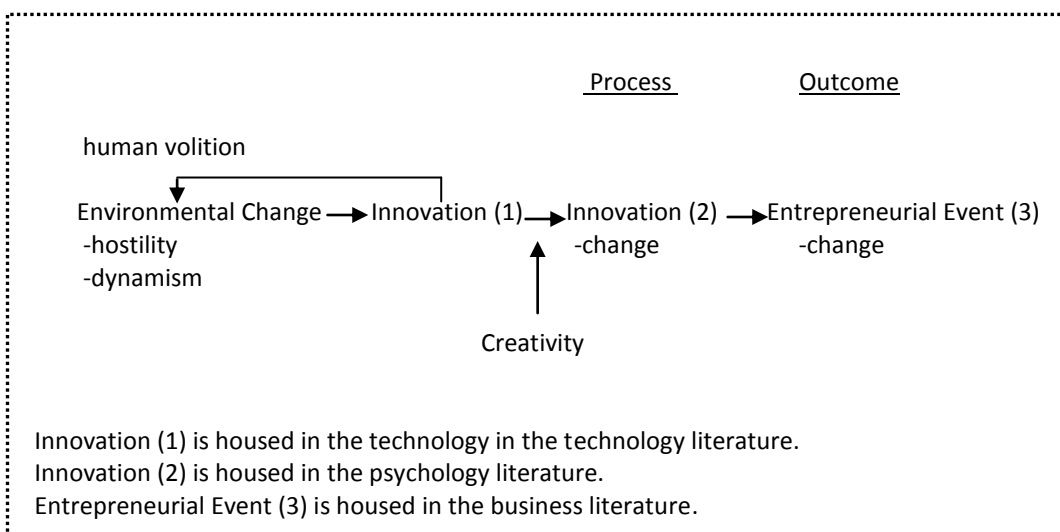


Fig. 1: Model of entrepreneurial process: the respective roles of change, creativity, and innovation (adapted from Brazeal & Herbert, 1999)

According to Brazeal and Herbert (1999), the need for an entrepreneurial attempt originates by a change in the environmental conditions such as hostility or dynamism. Hostility in the environment threatens company's position in the market through increased rivalry and decreased demand to company's products (Miller & Friesen, 1982). Accordingly, faced with hostility, companies start to search for new business opportunities in the market (Zahra, 1991). Moreover, increased dynamism result in changes in the environment and increase rivalry both of which spur companies to pursue new opportunities in the market by engaging in entrepreneurial activities (Zahra, 1991). This environmental state is recognized through an entrepreneurial mindset represented by human volition is turned into an opportunity. This opportunity leads to innovation and change process to start, which in turn creates an outcome like a product or service. Although change is usually perceived as an antecedent of entrepreneurial event, considering that it may also have a negative character, it is more appropriate to state that it sets the appropriate conditions for innovation to occur (Brazeal & Herbert, 1999). Once an environmental change takes place and individual volition desires to exploit the opportunity, innovation occurs. According to the model, creativity is the origin of innovation and determines its newness, but is not sufficient for the emergence of it. Brazeal and Herbert (1999) stated that entrepreneurial event is the end state of this process that involves how this innovation is managed. An entrepreneurial event is more than the modification of existing structures. For such an event to occur, there need to be a separate exploitation and management. "The entrepreneurial event is a non-linear event, and, thus, is geared toward the concrete outcome of radical

innovations which are implemented through radical changes” (Brazeal & Herbert, 1999; p. 41).

Innovation, like change, can be defined as an outcome or a process (Brazeal & Herbert, 1999). Existence of various theories of innovation each contributing to different aspects of the phenomena (Wolf, 1994), inhibits the development of an accepted definition of the term at the organizational level. According to Wolf (1994), “the most consistent theme found in the organizational innovation literature is that its research results have been inconsistent” (p. 405). The field of innovation is very extensive and non-cumulative (Damanpour, 1991). Damanpour (1991) suggested that the concept has been studied from various aspects: diffusion or adoption of innovation (Kimberly, 1981), innovating or innovativeness (Van de Ven & Rogers, 1988), and different levels of analysis (i.e., individual or organization. Camisón-Zornoza, Lapiedra-Alcami, Segarra-Ciprés, and Boronat-Navarro (2004), in their meta analysis of innovation and size, developed four categories in regard to dimensions of innovation: stages of the innovation process (i.e., organizational as generator or an adopter of innovation), level of analysis (i.e., industry, organization, subunits, innovation), types of innovation (i.e., technical-administrative, product-process, and radical-incremental innovation), and lastly scope of innovation (i.e., the number of innovations adopted in the firm). While the study of innovation is usually rooted in the technology literature which represents its implementation psychologist focus on the human side (i.e., organizational cultures fostering innovation) (Brazeal & Herbert, 1999). Moreover, innovation is usually classified as either incremental or radical in nature (Garcia & Calantone, 2002; Brazeal &

Herbert, 1999); where incremental innovation involves small modifications and radical innovation reflects discontinuous and dramatic changes. Broadly, innovation is defined as the adoption of a new idea or behavior, such as a system, program, product or service that is new to the organization (Damanpour & Evan, 1984). Damanpour (1992) stated that the above definition of innovation includes all types of innovations in organizations. Moreover, Slappender (1996) noted that the most important distinguishing feature of an innovation is novelty, and innovation also differs from change. Zaltman, Duncan, and Holbek (1973) noted that while all innovations involve change, not every change involve innovation. Overall, organizations either adopt innovation (they may purchase or develop the innovation) as a response to changes in the internal or external environment or as a preemptive fashion (Damanpour, 1992). Accordingly, firm-level entrepreneurship which occurs through innovation involves the preemptive adoption of organizational innovations.

McFadzaen, O'Loughlin, and Shaw (2005), with an attempt to establish a link between corporate entrepreneurship and innovation, stated that there is a diversity in the innovation literature regarding the definition of innovative activity; and conclude that innovation, as a process, adds value and novelty to the organization and its stakeholders through newness in organizational outcomes such as new product development. Authors define innovation as a process which involves idea generation, problem solving, and implementation and diffusion. The relationship between corporate entrepreneurship and innovation process is established through the entrepreneurial attitudes, vision, and actions of the corporate entrepreneur

(McFadzaen et al., 2005).

Once companies grow in size, structure, organization, and planning become important terms that entrepreneurs do not normally associate with entrepreneurship (Thornberry, 2001). The initial creation of a business is directly associated with entrepreneurship. However, through time, inevitable necessities of daily business activities increase the importance of key organizational variables such as efficiency, planning, and control. As a result, entrepreneurship is hampered. Accordingly, as start-up businesses grow and already established companies become larger, corporate entrepreneurship becomes essential for management in order to invigorate the entrepreneurial spirit (Thornberry, 2001). According to Brazeal and Herbert (1999), there are several similarities between entrepreneurship within (corporate entrepreneurship) and without the established organization.

Authors differentiate between these concepts as follows:

The classical conception of entrepreneurship is that the individual, independent entrepreneur who assumes financial and other risks in order to exploit a new idea or product possibility; he or she may be supported by another, perhaps a venture capitalist or a family member, but the risks of failure uniquely devolve upon the entrepreneur. In the corporate entrepreneurship, individual or group entrepreneurship is fostered within a pre-existing organizational setting, which provides support for the development and exploitation of one or more innovations deemed strategically and financially consistent with the supporting organization's mission (p. 40).

According to Hisrich (1990), the basic distinction between entrepreneurship and intrapreneurship is that the first one is for personal gain and the second one is for the organizational gain. The context within which entrepreneurial activity takes place is the main denominator differentiating entrepreneurship and

intrapreneurship (Shetty, 2004).

Firm-level Entrepreneurship

Corporate entrepreneurship, which is a frequently used term for firm-level entrepreneurship, is an evolving area of research, but there is neither a universally accepted definition of the term nor a consensus on what it is (Covin & Miles, 1999; Gautam & Verma, 1997; Guth & Ginsberg, 1990). Different terms have been even used to refer to firm-level entrepreneurship, such as intrapreneurship (Burgelman, 1983; Kuratko, Montagno & Hornsby 1990), entrepreneurial orientation (Miller & Friesen, 1982), entrepreneurial posture (Covin & Slevin, 1991), internal corporate entrepreneurship (Schollhammer, 1982), strategic entrepreneurship (Ireland, Hitt, & Sirmon, 2003), or corporate venturing (Guth & Ginsberg, 1990). The examination of the definitional issues in the field reveals that either same terms have been used differently by different authors or same authors have used different terms to refer to the same phenomenon (Sharma & Chrisman, 1999, p. 12). Among these suggested terms, “corporate entrepreneurship” (Guth & Ginsberg, 1990; Vesper, 1984; Zahra, 1991) and “entrepreneurial orientation” (Knight, 1997; Lumpkin & Dess, 1996; Wiklund, 1999) has been adopted by many scholars. In general, corporate entrepreneurship term will be used hereafter in the literature survey section to refer to innovative/venturing, renewal, and rejuvenation activities occurring in organizations.

The concept of corporate entrepreneurship includes the efforts of large

firms to renew themselves by carrying out new combinations of resources that transform their relationship with the environment (Burgelman, 1983). In other words, it refers to the process whereby firms engage in diversification through internal development, which requires innovative resource arrangements to extend the firm's activities in areas unrelated to its current domain of competence (Burgelman, 1983; p. 1349).

Miller and Friesen (1982) made a distinction between corporate entrepreneurship and entrepreneurial strategy. While corporate entrepreneurship is defined as an infrequent attempt to implement innovation, an entrepreneurial strategy is conceptualized as the frequent and persistent effort to establish competitive advantage through innovation. Zahra (1991) defined corporate entrepreneurship as the process of creating a new business within established firms or as the strategic renewal of the existing business. The basic drive behind these initiatives is to strengthen organizational profitability and improve competitiveness. Venkataraman (1997), emphasizing the exploitation of opportunities, stated that entrepreneurship field aims to understand how future goods and services are discovered and exploited. According to Antoncic and Hisrich (2003), intrapreneurship as entrepreneurship within established organizations, covers both behavioral intentions and actual behaviors that are related to departures from usual. Ahuja and Lampert (2001) argued that "corporate entrepreneurship adds value not only by utilizing resources in new ways but also, perhaps more importantly, by creating new resources" (p. 524).

Broadly, all types of entrepreneurship are based on innovations that require

new resource deployment and generate new positioning opportunities in the markets (Stopford & Baden-Fuller, 1994). In general, corporate entrepreneurship can be defined as the pursuit of creative or novel solutions to challenges confronting the firm, including the development or enhancement of products and services as well as new administrative techniques and technologies for performing organizational functions (Knight, 1997; p. 214). However, the broadest definition of intrapreneurship is provided by Pinchott (1985) as the entrepreneurship inside the organization.

Despite the non-existence of a consensus on the definition of corporate entrepreneurship, the term has been conceptualized with multiple dimensions (Covin & Slevin, 1989; Khandwalla, 1977; Miller & Friesen, 1982; Zahra, 1991). Khandwalla (1977) studied the relationship between top management style, environmental context, and firm performance among 103 large Canadian firms and operationally defined two management styles: entrepreneurial and conservative. According to the author, "entrepreneurial orientation" is mainly associated with innovation and proactiveness in organizations. There were nine items in the scale under these two main dimensions of innovativeness and proactiveness. The scale overall renders an assessment of a given company's degree of entrepreneurship.

This scale was subsequently refined by Miller and Friesen (1982) and by Covin and Slevin (1989). Miller and Friesen (1982) developed two different models of product innovation. Conservative model assumes that innovation is performed reluctantly in response to serious challenges and entrepreneurial model assumes that innovation is performed aggressively and continuously. Their study was

conducted among 52 Canadian firms and a negative correlation was expected between the two models. In their study entrepreneurial firm is defined as the one that engages in product innovation, undertakes risk and is first in coming up with innovations, therefore they operationally defined entrepreneurial orientation in terms of innovation, proactiveness and risk-taking. Product innovation refers to the ability to create new products or modify existing ones to meet the demands of current or future markets. Proactiveness refers to a company's capacity to outperform competitors by introducing new products, services, or technologies. Finally, corporate entrepreneurship indicates that a company is willing to engage in business ventures in which the outcome may be highly uncertain and, therefore, risky.

After Miller and Friesen (1982), “entrepreneurial orientation” scale was further refined by Covin and Slevin (1989). Covin and Slevin studied 161 small entrepreneurial firms in hostile and benign environments; the entrepreneurship construct was referred as “entrepreneurial strategic posture” and was characterized by frequent and extensive technological and product innovation, aggressive competitive orientation and a strong risk-taking propensity. The scale consisted of nine items measuring three dimensions of innovation, proactiveness and risk taking with a 7 point scale; first three items measuring firm’s tendency toward innovation, second three assessing the firm’s proactive orientation and the last three items assessing the firm’s risk taking propensity (Covin & Slevin 1989). Overall, “entrepreneurship orientation” scale has been found to possess strong reliability and validity in numerous studies (e.g., Covin & Slevin 1989; Khandwalla 1977).

Later on, Covin and Slevin (1991) developed a behavioral model of entrepreneurship as well, which incorporates the three dimensions of innovation, proactiveness, and risk taking and where entrepreneurial posture affects firm performance. This behavioral model of entrepreneurship emphasizes that *behaviors* rather than *attributes* give meaning to the entrepreneurial process:

An individual's psychological profile does not make a person an entrepreneur. Rather, we know entrepreneurs through their actions. Similarly, non-behavioral organizational-level attributes, like organizational structure or culture, do not make a firm entrepreneurial. An organization's actions make it entrepreneurial. In short, behavior is the central and essential element in the entrepreneurial process (Covin & Slevin, 1991; p. 8).

According to Guth and Ginsberg (1990), corporate entrepreneurship covers two types of processes: birth of new businesses within organizations and transformation of organizations through renewal. Internal venturing and innovation is only one aspect of corporate entrepreneurship. Although this may result in strategic renewal, there are other ways that lead to strategic changes in organizations as well (Guth & Ginsberg, 1990). Using the innovation/venturing and renewal dimension, Zahra (1991) defined "corporate entrepreneurship" as:

...formal and informal activities aimed at creating new business in established companies through product and process innovations and market developments. These activities may take place at the corporate, division (business), functional, or project levels, with the unifying objective of improving a company's competitive position and financial performance. Corporate entrepreneurship also entails the strategic renewal of an existing business (p. 262).

Corporate entrepreneurship implied engagement of the firm in activities such as venturing, innovation, and self-renewal. In this conceptualization, corporate

innovation and venturing incorporates four components of new business creation, new product introduction, percent of revenue from new product, and technological entrepreneurship. The renewal dimension incorporates mission reformulation, reorganization, and system-wide change.

These two conceptualizations of firm-level entrepreneurship (Covin & Slevin, 1989; Zahra, 1991) are adopted by many scholars as the main measures of firm-level entrepreneurship; but there exist certain differences among them. While “entrepreneurial strategic posture” (Covin & Slevin, 1991) aims to measure behaviors of the companies, an examination of the scale indicates that some items are basically related to attitudes or postures (e.g., In general, the top management of my firm have *a strong proclivity for* high-risk projects (with chances of very high return) (Covin & Slevin, 1989; p. 87)).

The instrument (entrepreneurship posture scale) contains a mix of current attitudes and past behaviors, which creates confusion about the construct it aims to measure (Wiklund, 2006). Emphasizing this point, Zahra (1991) indicated that the entrepreneurial orientation scale first developed by Khandwalla (1977) and further refined by Miller and Friesen (1982) and Covin and Slevin (1989) emphasizes a firm’s *disposition or orientation* towards corporate entrepreneurship activities rather than their actual engagement and covers only the formal activities. Corporate entrepreneurship scale (Zahra, 1991), on the other hand, involves behaviors such as rewarding employees for creativity and innovation or establishing a unit or department responsible for innovation and corporate development (Zahra, 1993a; p. 339).

Zahra (1993b) also criticized the Covin and Slevin's (1991) conceptual model of entrepreneurship as firm behavior. According to the author, "entrepreneurial posture", as defined by Covin and Slevin (1991), fails to recognize the wholeness of entrepreneurship and is unclear on four issues: the intensity of the behavior, the formality of the behavior, the types of activities to renew itself and redefine its business, and the duration of such efforts. The author further suggested the extension of Covin and Slevin's (1991) model by differentiating between different the types of corporate entrepreneurship, since each type requires different organizational skills and has diverse relationships with strategic, environmental, and organizational variables.

According to Stopford and Baden-Fuller (1994), there are common attributes of different types of entrepreneurship within organizations that can all exist in one company. While the authors discuss proactiveness as the first attribute; unlike previous studies (e.g., Covin & Slevin, 1989; Miller & Friesen, 1982), they do not associate risk-taking with entrepreneurship. For them, organizations enter into entrepreneurial actions to minimize their risks. Therefore, while they need to be proactive, this should not be associated with taking high risks. The second attribute is aspirations beyond current capability, which is the goal of continuous improvement. The third one is team-orientation that incorporates the important role of teams that initiate and support new ideas. The fourth attribute is capability to resolve dilemmas; and the last one is learning capability, which is largely ignored in entrepreneurship studies but is central in literature of innovation and change literature. While these attributes do not represent direct operationalization of the

corporate entrepreneurship concept in organizations, it draws attention to attributes existent in different entrepreneurial activities.

Lumpkin and Dess (1996) also provided an extensive conceptualization of “entrepreneurial orientation” construct. According to the authors, entrepreneurial orientation refers to the processes, practices, and decision making activities that lead to new entry. Additional to innovativeness, proactiveness, and risk taking, it should further include tendencies to act autonomously (motivation to innovate and take risks) and to be aggressive towards competitors. Autonomy refers to independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion (Lumpkin & Dess, 1996; p. 140) and competitive aggressiveness refers to a firm’s ability to challenge and outperform its competitors.

Covin and Miles (1999) suggested that there is still ambiguity surrounding the corporate entrepreneurship construct and identified the three most common examples of corporate entrepreneurship. First situation involves an established organization entering a new business; second one is individual new product ideas within a corporate context; and the last one is an entrepreneurial philosophy spread through an entire organization's stance. Innovation is inarguably at the centre of the nomological network surrounding the corporate entrepreneurship construct, but the missing element is rejuvenating and persistently redefining organizations in order to create competitive advantage (Covin & Miles, 1999). Accordingly, the authors developed four different forms of corporate entrepreneurship: sustained regeneration, organizational rejuvenation, strategic renewal, and domain

redefinition. Sharma and Chrisman (1999) reviewing the corporate entrepreneurship literature in terms of definitional issues developed a hierarchy of terminology. The authors differentiated between corporate venturing, strategic renewal, and innovation three main types of corporate entrepreneurship. Corporate venturing further divided into internal corporate venturing and external corporate venturing.

In a study by Antoncic and Hisrich (2001), corporate entrepreneurship construct has been refined and “entrepreneurial orientation” and “corporate entrepreneurship” scale has been incorporated to check cross cultural validation. Data was collected by using two surveys from the United States and Slovenia and the analyses showed moderately good convergent and discriminant validity across these two samples. Authors developed an intrapreneurship model incorporating new business venturing, innovativeness, self-renewal, and proactiveness and their direct effects on company performance. New business venturing dimension refers to the creation of new businesses within the existing organization regardless of the level of autonomy. Innovativeness dimension refers to the creation of new products, services, and technologies; while self-renewal dimension emphasizes the strategy reformulation, reorganization, and organizational change. Finally, the proactiveness dimension reflects top management orientation in pursuing enhanced competitiveness and includes initiative and risk-taking, competitive aggressiveness, and boldness.

While risk taking, innovativeness, and proactiveness dimensions tap some important aspects of entrepreneurship, more recent studies emphasize opportunity

recognition and exploitation as a firm behavior as well (Brown, Davidsson & Wiklund 2001). Stevenson and Jarillo (1990) developed an opportunity-based conceptualization of entrepreneurship and argued that entrepreneurial value creating processes can take place in any type of organization. In their study, entrepreneurship was defined as “the process by which individuals - either on their own or inside organizations - pursue opportunities without regard to the resources they currently control” (Stevenson & Jarillo, 1990; p. 23). This definition puts the focus on entrepreneurship as the pursuit of an opportunity, irrespective of the organizational context (Brown et al., 2001). The authors conceptualized entrepreneurship as the passion for the pursuit and exploitation of opportunity without regard to resources currently controlled. A differentiation between entrepreneurial (promoter firms) and administrative (trustees) behavior (Brown et al., 2001) is also made. The promoter firm continuously seeks to pursue and exploit opportunities, while the trustee strives to make the most efficient use of its resources. With these two extremes being two ends of a spectrum, eight dimensions are developed. Strategic orientation, as the first dimension, is driven by the perception of the opportunity in promoters, and by controlled resources in trustees. Commitment to opportunity is revolutionary with short durations in promoters, but evolutionary with long durations in trustees. Commitment to resources is in small amounts and in a multi-step manner with minimal risk exposure in each stage in promoters, while there is a single stage with complete commitment in trustees. Control of resources is episodic use or rent in promoters, while it denotes ownership and employment in trustees. As to fifth dimension, flat

structures and networks are seen in promoter firms as the management structure, while there is hierarchy in trustees. Reward philosophy is based on value creation for promoters, but it is based on responsibility and seniority in trustees. Promoter firms value rapid growth with high degrees of accepted risk and, on the contrary, trustees have safe, slow and steady growth orientation. Lastly, with respect to entrepreneurial culture, promoter firms promote broad search of opportunity while trustees' opportunity search is restricted to the current resources of the firm. Based on these eight dimensions, a measurement instrument was developed (Brown et al., 2001) and tested for validity and reliability. As a result, strategic orientation, resource orientation, management structure, reward philosophy, growth orientation, and entrepreneurship culture are found as the dimensions that differentiate between promoter and trustee firms from one another.

Antoncic and Hirsch (2003) also contributed to the corporate entrepreneurship literature by clarifying the intrapreneurship construct. Reviewing the previous operationalizations (e.g., Covin & Slevin, 1991; Guth & Ginsberg, 1990; Knight, 1997; Lumpkin & Dess, 1996; Miller & Friesen, 1982; Zahra, 1991, 1993a), authors proposed an eight dimensional operationalization of corporate entrepreneurship (or intrapreneurship in their terms). The eight dimensions involved new ventures (creation of autonomous or semi-autonomous units or firms), new businesses (pursuit of and entering into new businesses related to current products or markets), product and service innovativeness (creation of new products and services), process innovativeness (innovations in production procedures and techniques), self-renewal (strategy formulation, reorganization and

organizational change), risk taking, proactiveness (top management orientation in pioneering and initiative taking), and competitive aggressiveness (aggressive posturing towards competitors).

As Antoncic and Hisrich's (2003) review of the field for the clarification of the intrapreneurship concept states, there are two streams of research. First stream has started by Miller and Friesen's (1982) conceptualization, which is further refined by Covin and Slevin (1991). This classification basically adopts innovativeness, risk taking and proactiveness as the three dimensions that define firm-level entrepreneurship. Lumpkin and Dess (1996) further added two more dimensions: autonomy and competitive aggressiveness. Second stream of research follows Guth and Ginsberg's (1990) and Zahra's (1991, 1993a) conceptualization, which adopts two dimensions of innovation/venturing and strategic renewal. Table 1. summarizes these basic conceptualizations of firm-level entrepreneurship.

Table 1. Basic Conceptualizations of Firm-Level Entrepreneurship

Authors	Construct Name	Dimensions
Miller and Friesen (1982)	Innovation	New products Proactiveness Risk taking
Covin and Slevin (1989, 1991)	Entrepreneurial posture	Innovativeness Risk taking Proactiveness
Guth and Ginsberg (1990)	Corporate Entrepreneurship	Innovation/venturing Strategic Renewal
Zahra (1991, 1993a)	Corporate Entrepreneurship	Innovation/venturing Strategic Renewal
Lumpkin and Dess (1996)	Entrepreneurial orientation	Autonomy Innovativeness Risk taking Proactiveness Competitive aggressiveness
Knight (1997)	Entrepreneurial orientation	Innovativeness Proactiveness

Zahra et al. (1999), reviewing the literature on firm-level entrepreneurship, developed a typology of the phenomenon and stated that classification of different types of entrepreneurial activities should be based on the content of the act (innovation or venturing), locus of the act (internal or external), and source of the act (formal or informal). However, further categorization of different entrepreneurial activities is not provided in the study. Pointing the growing trend of corporate entrepreneurship literature in a fragmented pattern Ireland, Covin, and Kuratko (2009) developed the corporate entrepreneurship strategy concept in a framework with the antecedents, elements, and the outcomes of the proposed strategy. A more recent concept that is increasingly being discussed in the field entrepreneurship is strategic entrepreneurship (Ireland et al., 2003; Kuratko & Audretsch, 2009). According to Ireland et al. (2003) strategic entrepreneurship involves actions towards both opportunity and advantage seeking but the literature lacks clear conceptualizations of the concept.

An examination of past studies on corporate entrepreneurship indicates that most of the studies adopt one of the two conceptualizations of firm-level entrepreneurship: “entrepreneurship orientation” (e.g., Covin & Slevin 1989, 1991; Khandwalla, 1977; Miller & Friesen, 1982) and “corporate entrepreneurship” developed by Zahra (1991, 1993a). While various studies have added some dimensions to these, they have provided the main base of research.

Taking into consideration the above literature review, it can be stated that research on entrepreneurship and especially firm-level entrepreneurship is still developing. The lack of a consensus on how to characterize firm-level

entrepreneurship leads to deficiencies in theory development and inhibits proper theory building and testing (Lumpkin & Dess, 1996). There is even no agreement on whether firm-level entrepreneurship is a unitary or a multidimensional concept. While most of the conceptualizations are multidimensional, there is a divergence on whether dimensions covary or not. Therefore, there is a need to study both the links between different dimensions of corporate entrepreneurship and the overall domain more accurately (Zahra, 1993b). Moreover, literature mentions different types of firm-level entrepreneurship. However, there exists no clear conceptualization and operationalization of different forms that incorporate actual actions. Phan, Wright, Ucbasaran, and Tan (2009) appreciate the heterogeneity of different corporate entrepreneurship activities in the organizations and proposed that further research should elaborate on knowledge-based resources and process in corporate entrepreneurship field.

Organizational Level Correlates of Firm-level Entrepreneurship

Entrepreneurial behavior is not independent of other organizational conduct variables; rather it takes place within the context of full organizational actions (Dess, Lumpkin & Covin, 1997). There are certainly organizational determinants that favor the emergence of firm-level entrepreneurship and there are outcomes of it. Among internal variables affecting firm-level entrepreneurship, there is growing awareness regarding the importance of corporate culture supporting organizational values that encompass innovation and entrepreneurship (Luchsinger & Bagby,

1987). Guth and Ginsberg (1990) mentioned core values and beliefs among organization conduct/form variables affecting corporate entrepreneurship. Lumpkin and Dess (1996) studied the effect of organizational culture as a moderating variable influencing impact of entrepreneurial orientation on firm performance. The leadership style dominant in the organization is also found to have a substantial effect on the climate within which entrepreneurship or innovation occurs (Bhattacharyya, 2006). The leaders determine the accepted ways of doing business in organizations and, therefore, are important influencing factors of entrepreneurial initiatives in firms. Lumpkin and Dess (1996) stated that, top management team characteristics as an organizational factor have a moderating influence on the relationship between entrepreneurial orientation and firm performance. As to consequences of firm-level entrepreneurship Wiklund (1999) emphasized that entrepreneurial orientation of a firm leads to greater performance when the firm has a first mover advantage and an ability to capture and exploit market opportunities. The positive relationship between firm-level entrepreneurship and performance have been emphasized in many studies (e.g., Antoncic & Hisrich, 2001; Covin & Slevin, 1991; Lumpkin & Dess, 1996; Zahra, 1991). Accordingly, as to organizational level correlates of firm-level entrepreneurship organizational culture, leadership, and organizational performance concepts are focused on in the current study. In the following parts of this section literature review in these fields are presented.

Organizational Culture

The organizational culture concept has been introduced to academia by the seminal work of Pettigrew (1979), who studied it in relation to symbolism, myth, and rituals. The author defined culture as “the system of such publicly and collectively accepted meanings operating for a given group at a given time” (p. 574). Although there is no consensus on what organizational culture is, there are some common attributes discussed in the literature. According to Hofstede, Neuijen, Ohavy, and Sanders (1990), organizational culture is holistic, historically determined, related to anthropological concepts, socially constructed, soft, and difficult to change. Schein (1992) defined the term as: “a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (p. 12).

Organizational culture is also associated with organizational climate.

According to Denison (1996), there is an artificial separation between the constructs of organizational climate and organizational culture: two streams of research study different manifestations of the same construct. The author stated that, at first glance, the distinction seems clear: organizational climate refers to situation and, therefore, is temporal, subjective, and subject to direct influence of power; while organizational culture refers to an evolved context and is, consequently, rooted in history, collectively held, and resistant to direct manipulation. However, a deeper

examination reveals that the difference is only in interpretation rather than in phenomenon (Denison, 1996).

Hofstede et al. (1990) studied organizational culture under four categories: values (unconscious and unobserved feelings), rituals (collective social activities), heroes (persons who possess valued characteristics), and symbols (words, gestures, objects that carry particular meaning). Rituals, heroes, and symbols are studied as practices that are more visible and observable. The study identified three dimensions of values as need for security, work centrality and need for authority; and six dimensions of culture for practices as process vs. results oriented, employee vs. job oriented, parochial vs. professional oriented, open vs. closed system, loose vs. tight control and normative vs. pragmatic. While dimensions are found both at values and practices levels, their study surmises that national culture is represented by values while organizational culture is represented by practices (Dickson, Aditya & Chhoker, 2000).

Schein (1992) developed a typology of organizational culture at three levels: basic underlying assumptions, espoused values, and artifacts. Artifacts are visible structures and processes but they are hard to interpret; espoused values incorporate strategies, goals or philosophies; and basic underlying assumptions are unconscious, taken-for-granted values, perceptions, and thoughts that constitute the source of values and actions. Author studied culture with two basic dimensions of adapting to external environments and integration of internal processes. External adaptation incorporates mission and strategy, goals, means, measurement, and correction. Internal integration involves creating common language and

conceptual categories, defining group boundaries, distribution of power and status, norms of intimacy, friendship and love, rewards, punishment, ideology, and religion. Additional to these, the author emphasized the assumption about reality, truth, time, and space and the assumptions about human nature, activity, and relationships as more abstract and deeper dimensions of culture.

“Organizational Culture Inventory” (Cooke & Rousseau, 1988) is a tool which aims to measure organizational culture quantitatively. Twelve different organizational culture styles that assess the way in which organizational members are expected to think and behave in organizations are determined: humanistic-helpful, affiliative, approval, conventional, dependent, avoidance, oppositional, power, competitive, competence/perfectionist, achievement, self-actualizing.

Cameron and Freeman (1991) and Quinn (1988) also provided a model for organizational culture types. Based on the two dimensions of internal maintenance vs. external positioning and organic processes vs. mechanistic processes, four different types of cultures are suggested. In hierarchy cultures, dominant attributes are order, uniformity, stability, and predictability. In market cultures, the dominant values are competitiveness and goal achievement. The clan culture emphasizes loyalty, cohesion, and participation; while adhocracy culture values creativity, entrepreneurship, and flexibility.

Denison and Mishra (1995), exploring the relationship between organizational culture and effectiveness, found four cultural traits: involvement (participation and high levels of commitment), adaptability (adaptation to dynamic and rapidly changing environment), consistency (strong value for tradition,

established procedures, and conformity), and mission (sharing a vision of the future). The dimensions that differentiate between different cultures are similar to those provided by Cameron and Freeman (1991) and Quinn (1988): external orientation vs. internal integration and change and flexibility vs. stability and direction.

Trompenaars and Hampden-Turner (1998) developed four different organizational culture types by using egalitarian vs. hierarchy and orientation to person vs. task dimensions. The family culture (person-oriented culture) is hierarchical and person-oriented, incorporating basic characteristics of long-term devotion to the organization, natural perception of power, and diffuse type of relationships. The Eiffel Tower culture (role-oriented culture) is hierarchical and task-oriented. Basic characteristics of this type of culture are bureaucratic division of power, specific type of relationship, and depersonalization of authority. The guided missile culture (project-oriented) is egalitarian and task-oriented, which is typically adopted by teams or project groups. The incubator culture (fulfillment-oriented culture) is again egalitarian but is person-oriented. These are entrepreneurial organizations where self-fulfillment is central and leadership is achieved.

“Global Leadership and Organizational Behavior Effectiveness” (GLOBE) is a research project studying relationships between societal culture, organizational culture, and leadership (House et al., 2004). The study provides a conceptualization of organizational culture under nine dimensions. Different from Hofstede et al. (1990), GLOBE study examined organizational culture at both values (should be) and

practices (as is) levels (Dickson et al., 2000). The dimensions of culture include power distance, uncertainty avoidance, humane orientation, assertiveness, gender egalitarianism, future orientation, performance orientation, individualism/collectivism, and organizational collectivism.

To date, the dimensions of organizational culture discussed in the literature have not been synthesized properly (Detert, Schroeder & Mauriel, 2000). Detert et al. (2000) performed a qualitative content analysis of the studies on organizational culture to summarize the dimensions described in the past two decades. It has been found that the majority of the culture concepts adopt a quite small number of dimensions. The summarized dimensions are: the basis of truth and rationality in the organization, the nature of time and time horizon, motivation, stability vs. change/innovation/personal growth, orientation to work, task and coworkers, isolation vs. collaboration/cooperation, control, coordination and responsibility and internal or external orientation.

The review of literature on organizational culture also reveals that authors either develop multiple *dimensions* of culture or different *types* of culture. In the review of the questionnaire measures of organizational culture, Ashkanasy, Broadfoot, and Falkus (2000) differentiated between two main categories of instruments. Typing surveys are standardized instruments that produce discrete types of organizational cultures, while profiling surveys describe organizations by measuring a diverse set of organizational members' beliefs and values. Typing organizational cultures mainly enables comparison of mutually exclusive culture types (Ashkanasy et al., 2000). The basic disadvantage of typing however, that it

hinders the unique nature of cultures (Schein, 1985). On the other hand, profiling instruments provide scores on varying dimensions of culture and categorize organizations based on these dimensions (Ashkanasy et al., 2000).

Leadership

The literature lacks universally accepted set of elements that constitute the context of leader behavior in a given organizational setting (Porter & McLaughlin, 2006).

While there are several definitions of leadership in the literature, according to Yukl (2002), there is an agreement on the issue that the definition of leadership definitely involves “intentional influence on others”. Yet, as the author notes, “...domain of leadership processes to be studied should not be limited by their intended purpose” (Yukl, 2002; p. 5). In other words, unintentional influence on followers should also be examined, considering that leadership may be influenced by certain inborn characteristics.

The review of ten years of the “Leadership Quarterly” journal by Lowe and Gardner (2000) show the leadership theories appearing in the journal can be categorized as follows: trait theories, behavioral theories, contingency theories, multiple-linkage approaches, leadership and information processing, neo-charismatic approaches, and certain other prominent approaches such as romance of leadership and new directions such as political leadership. Summary figures state that neo-charismatic approaches to leadership such as transformational and charismatic leadership are prominent theories (34% of the articles in the last

decade) indicating a paradigm shift rejuvenating the field (Lowe & Gardner, 2000).

On the other hand, Yammariona et al. (2005) reviewed the leadership literature with a focus on the levels of analysis. Similarly, the authors classified leadership research as classical approaches (Ohio State Model (Fleishmen, 1953); Path Goal Theory (House, 1971)); contemporary approaches (Charismatic Leadership (House, 1977); Transformational Leadership (Bass, 1985)); alternative approaches (Substitutes for Leadership (Kerr & Jermier, 1978)); and new wave approaches (Individualized Leadership (Dansereau, 1995)). Yukl (2002) also identified five approaches of leadership theories: trait, behavioral, power-influence, situational, and integrative.

Early leadership theories fundamentally concentrated on traits of leaders with a basic assumption that people are natural leaders or not. This stream of research searched for universal characteristics that differentiated leaders from non-leaders (House & Aditya, 1997). The trait approach concentrated on personality, motives, gender, appearance, values, and skills of leaders but lacked a focus on the leader-follower relationship (House & Aditya, 1997; Yukl, 2002).

Behavioral approaches to leadership started in 1950's with a concentration on effective leadership behavior. Ohio State Leadership Studies (Fleishmen, 1953) focused on the categories of leadership and differentiated between consideration and initiating structures. Initiating structure is task-oriented and emphasizes plans, goals, and meetings; while consideration is behavior-oriented, where interpersonal relations are important and leadership style is supportive, friendly, and consulting (Yukl, 2002). Ohio State Leadership Studies treated these two leadership styles as

two independent leader behaviors, suggesting that a leader can have both initiating and consideration structures (House & Aditya, 1997). As an example of another behavioral model of leadership, Blake and Mouton (1964) developed the Managerial Grid which basically emphasizes the effectiveness of *high* concern for people and *high* concern for production. Essentially, behavioral approaches to leadership specified the task- and people-oriented behaviors and their effectiveness.

Contingency theories of effective leadership started to emerge around 1970's and fundamentally emphasized the importance of situational factors affecting leadership effectiveness. Fiedler's "Least Preferred Coworker" (LPC) "Contingency Theory" (Fiedler, 1967) is one of the earliest contingency theories of contingency leadership. The theory develops two main factors affecting leadership effectiveness: task-oriented (low LPC) versus relationship-oriented (high LPC) and situation favorability (with respect to leader-member relations, position power, and task structure). It is suggested that, task-oriented leaders are predicted to be more successful in high- and low-control situations and relationship-oriented leaders are predicted to be more successful in moderate-control situations (Yukl, 2002).

"Path-Goal Theory" (House, 1971), another contingency approach to leadership, explains the effects of leader behavior on subordinate satisfaction, performance, and effort. This theory drive its roots from the expectancy theory and states that subordinate expectancy and valance is affected by certain situational factors like task, environment, and subordinate characteristics; and this affects the effectiveness of leadership behavior. Certain leadership types are developed such

as supportive leadership, directive leadership, participative leadership, and achievement leadership (Yukl, 2002). Fiedler and Garcia (1987) further developed “Cognitive Resources Theory” to better explain leadership phenomena. The theory develops two types of leadership variables such as leader intelligence and experience and a situational variable - stress experienced by leaders and followers. It also contributes to leadership literature mainly through answering the question of when to be more participative or directive with respect to followers in order to be more effective (House & Aditya, 1997).

Yukl (1981) developed “Multiple-Linkage” contingency model of leadership. This model studies the effect of leader behavior on unit effectiveness, where the relationship is moderated by certain intervening variables such as task commitment by subordinate, ability and role clarity, organization of the work, cooperation and mutual trust, resources and support services, and external coordination (Yukl, 2002). It suggests that leaders adopt appropriate behaviors according to varying situational factors.

In 1980’s leadership research started to concentrate on more emotional and symbolic aspects (Yukl, 2002) and more contemporary approaches to leadership emerged: charismatic leadership (e.g., Conger & Kanungo, 1987; House, 1977) and transformational leadership (e.g., Bass, 1985). Charismatic leadership has been introduced by the initial work of House (1977) and is further developed by Conger and Kanungo (1987). The concept basically concentrates on the influence of the leader over followers. According to the theory, the follower attributes charisma to the leader when the leader advocate a vision, develop extraordinary and

unconventional ways to achieve that vision, make self-sacrifices, concerns and considers the follower, and have confidence, skill and experience (Conger & Kanungo, 1987). Charismatic leaders gain respect, loyalty, and receive high levels of trust commitment and obedience (Yukl, 2002).

On the other hand, the concepts of transformational and transactional leadership have been introduced by Burns (1978). Transactional leaders motivate followers to perform as expected, but transformational leaders inspire followers to do more than expected (Hartog, Van Muijen & Koopman, 1997). Main components of transformational leadership are charisma, inspirational leadership, intellectual stimulation, and individualized consideration (Bass, 1996). Transformational leaders increase the morale and motivation of employees (Bass, 1999), facilitate coping with stress, and enhance their commitment and loyalty (Bass, 1996). Transactional leadership entails an exchange between leader and follower (Burns, 1978). It may take the form of contingent reward and active or passive management-by-exception (Bass, 1996). In general, these leaders only satisfy employees' immediate interests and usually induce stress (Bass, 1996).

Transformational leadership incorporates a charisma dimension and, therefore, has associations with charismatic leadership. Considering that charismatic leadership is perceived to be effective in Turkey (Kabasakal & Bodur, 2002), this association is important for the focus of the current study. Yukl (2002) discussed the basic distinctions between charismatic and transformational leadership. Charismatic leadership is associated with crisis, radical, risky, or extraordinary situations; while transformational leadership is associated with

visionary, inspirational, and appealing leadership (Yukl, 2002). Charismatic leadership incorporates risky and extraordinary behaviors which may sometimes result in negative circumstances in business environments, while transformational leadership is suggested to be effective in increasing organizational effectiveness. Hartog et al. (1999) studied the universality of charismatic and transformational leadership attitudes and behaviors. They found that transformational leadership attributes are perceived universally positive, while some items of charismatic leadership are found to be contingent on culture (such as risk taking). Considering this, the authors suggested the effectiveness of qualitative research in understanding the enactment of leadership.

Leader Member Exchange (LMX) theory (Dienesch & Liden, 1986) is an alternative leadership theory emphasizing dyadic relationship between the leader and the follower. The theory emphasizes a set of relationships between the superior and the subordinate, and this complex set of relationships involve behavioral patterns of both participants and their corresponding outcomes (House & Aditya, 1997). According to Yammarino, Dionne, Chun, and Dansereau (2005), the LMX literature is quite extensive in that it is suggested as perhaps the second most comprehensive leadership theory following transformational and charismatic leadership.

Additional to the general leadership theories discussed above, there are certain other leadership studies that concentrate on specific leadership types or styles. An example study in the organizational research literature, which attempts to develop different leadership types, is Mintzberg (1973). The author identified

three groups of roles that are observed among managers: interpersonal roles (figurehead, liaison, and leader roles), informational roles (monitor, disseminator, and spokesman), and decisional roles (entrepreneur, disturbance handler, resource allocator, and negotiator). Quinn (1984), who reviewed the literature on leadership, also developed eight leadership types (innovator, broker, producer, director, coordinator, monitor, facilitator, mentor roles) that are represented in a circular pattern separated with two underlying dimensions of stability vs. flexibility and internal vs. external focus.

Overall, the review of the leadership research suggests that alternative approaches to leadership theories are still developing (House & Aditya, 1997; Lowe & Gardner, 2000; Yammarino et al., 2005). The generic leadership functions in the mainstream leadership literature usually provide general categories of leadership behaviors (House & Aditya, 1997). According to House and Aditya (1997), it would be useful to draw distinctions between generic leadership functions and specific leadership behaviors: “in the current leadership literature, dimensions of leader behavior, specific leadership behaviors, and leadership style are often used interchangeably by some authors, while others use these terms to refer to different aspects of leadership” (House & Aditya, 1997, p. 448).

Organizational Performance

Organizational performance is one of the important dependent variables studied in almost all areas of research in management. Richard, Devinney, Yip, and Johnson

(2009) reviewed the organizational performance literature in the mainstream journals and analyzed the measurement issues in a total of 213 papers with 207 diverse measures. The review mainly differentiated between objective and subjective measures. Objective measures incorporate *accounting measures* (e.g., return on asset, return on equity, sales, sales growth), and *financial market measures* (e.g., earnings-per share, stock price, and market value), and *survival*. Subjective measures, on the other hand, involve fully-subjective measures and quasi-subjective measures.

Due to increased attention to theoretical and normative aspects of performance, there emerged three bottom lines for the assessment of organizational performance: economic, social, and environmental such as corporate social performance (Richard et al., 2009). In addition to financial outcomes, different aspects of performance like human capital have been subject of scholarly inquiry as well. Financial outcomes are undoubtedly crucial indicators of organizational performance; yet other more intangible outcome variables also tap important aspects of the phenomena.

“The Balance Scorecard” (Kaplan & Norton, 1996) and “Success Dimensions” (Shendar & Dvir, 1996) are developed as frameworks that aim to measure organizational performance with diverse dimensions. “Balance Scorecard” (Kaplan & Norton, 1996) is a multi-dimensional framework that measures performance with respect to four levels: customer, internal, innovation and learning, and financial. On the other hand, “Success Dimensions” (Shender & Dvir, 1996), asserting that measurement of company success only at one time can be misleading, measures

success at three organizational levels: project, business-unit, company; and at four time frames: very short, short, long, and very long. However, Maltz, Shendar, and Reilly (2003) criticized these two measures basically on the grounds that they both lack a focus on human resource dimension. Accordingly, authors developed the “Dynamic Multi-dimensional Framework “(DMF) that measures success on five key dimensions of financial, market, process, people, and future.

To sum up, the review of the organizational performance literature by Richard et al. (2009) concluded that there are definitional problems in theoretical sense and there is lack of consistency in the construct formulation. Overall, organizational performance construct preserves its importance in the management field. Additional to monetary outcomes of business, increased attention is given to more intangible outcomes such as knowledge development or learning capability.

This section of literature review chapter reviewed the literature on organizational culture, leadership, and organizational performance. In the next chapter, the literature that relates firm-level entrepreneurship to organizational culture, leadership, and organizational performance is focused on to develop the preliminary theoretical framework of the study.

CHAPTER III

PRELIMINARY THEORETICAL FRAMEWORK AND METHODOLOGY

In this chapter, first the literature that relates organizational culture, leadership, and organizational performance to firm-level entrepreneurship is reviewed and the preliminary theoretical framework of the research is developed. Next, the research questions and the methodology of the study are explained.

Preliminary Theoretical Framework

Some organizational environments or cultures enhance the implementation of entrepreneurial activities, while some others hamper it. With respect to environments favoring corporate entrepreneurship, Quinn (1985) studied factors that enhance innovation such as favorable atmosphere and vision for such initiatives and suitable organizational structuring. Sathe (1985) also emphasized that systematized reporting mechanisms in large corporations should be balanced with entrepreneurial culture of open communication and mutual trust if entrepreneurial activity needs to be fostered, while preserving corporate controls. Some other internal variables that are possible determinants of firm-level entrepreneurship are structure (Covin & Slevin, 1991), managerial support (Kuratko

et al., 1990; Stevenson & Jarillo, 1990), or decision making (Miller & Friesen, 1982). As Krueger, Jr. and Brazeal (1994) suggested, “a supportive culture encompasses structures, reward systems, and support mechanisms that collectively reinforce values and norms favorable toward entrepreneurship and innovation” (p. 100).

Kuratko et al. (1990) attempt to measure the effectiveness of the internal environment for the implementation of intrapreneurial ideas through the use of “intrapreneurship assessment instrument” (IAI). Authors studied five dimensions: management support for intrapreneurship, reward and resource availability, organizational structure and boundaries, risk taking, and time availability. The study supported three factors that favor firm-level entrepreneurship: managerial support, organizational structure, and reward and resource availability. In a further study emphasizing the importance of organizational factors facilitating or hampering corporate entrepreneurship (Hornsby, Kuratko & Zahra, 2002), IAI was revised as “corporate entrepreneurship assessment instrument” (CEAI) and factors included management support, work discretion, rewards/reinforcement, time availability, and organizational boundaries. This five-factor structure has been found as a parsimonious description of internal factors affecting managers to foster entrepreneurial initiatives within firms (Hornsby et al., 2002).

According to Covin and Slevin (1991), entrepreneurial posture is dependent on suitable organizational culture. Cornwall and Perlman (1990) also stated that “culture is a key determinant of, and the first step in fostering, entrepreneurial activity within an organization. In entrepreneurial organizations positive cultures support organizational entrepreneurship. In other organizations where

entrepreneurship is lacking as a strategic goal, the culture does not support risk taking, searching for opportunities, and innovation” (p. 66). Cornwall and Perlman (1990) determined ten different features of entrepreneurial cultures: risk tolerance, respect to own activity, ethics, confidence, and responsibility, people, emotional recognitions, satisfaction with work, leadership, focus to customer values, attention to details and finish, and effectiveness and efficiency. If corporations aspire to stimulate entrepreneurship, the place to start is the set of values that constitute culture (Ross, 1987).

Among several organizational culture variables, Covin and Slevin (1991) studied open expression of novel or radical ideas, empowerment of middle and lower level managers, belief that change and innovation are essential of organizational survival, and daily teamwork as variables affecting entrepreneurial posture. Zahra (1991) differentiated between tangible and intangible variables affecting corporate entrepreneurship. While tangibles include structure variables, intangible ones incorporate organizational values that are specifically individual-centered (how employees are treated in the organization) and competition-oriented (approaches that employees should follow when achieving organizational goals).

While studies on organizational culture are popular in the literature, there are few studies that associate specific dimensions of culture with organizational outcomes such as entrepreneurship (Zahra, Hayton & Salvato, 2004). Zahra et al. (2004) provided an initial attempt in this regard. The study examined the effects of organizational culture on entrepreneurship in family and non-family businesses.

The cultural dimensions that are tested for relations with entrepreneurship in the study are individual vs. group cultural orientation, internal vs. external orientation, assumptions concerning coordination and control, and short vs. long-term cultural orientation. It has been found that entrepreneurship in family firms is associated with moderate level of individualism, external orientation, decentralization of control and coordination, and long-term cultural orientation.

While certain organizational culture variables affecting firm-level entrepreneurship are studied (e.g., Covin & Slevin, 1991; Zahra, 1991; Zahra et al., 2004), literature regarding the detailed analysis of the relationship is underdeveloped. Accordingly, clarification of firm-level entrepreneurship concept and the examination of organizational environment favoring entrepreneurship are important to develop the right theoretical understanding of firm-level entrepreneurship and its relationship with organizational culture.

Leadership is also important in promoting innovation, business venturing, and strategic renewal in firms (Guth & Gisenberg, 1990). Vecchio (2003) reviewed entrepreneurship and leadership literatures in order to identify the common trends and common threads. Although the review focused on convergence/divergence between leadership and entrepreneurship at the individual level, the author suggested that ability to motivate subordinates is a critical attribute of the founder and when entrepreneurship occurs in an organizational setting, this inspirational motivation depends on the ability of the leader.

Cogliser and Brigham (2004), reviewing the intersection of leadership and entrepreneurship research, adopted a three-stage model for the evolution of the

two constructs and authors examined the characteristics of each stage based on three main questions: what is the leader/entrepreneur?, what does the leader/entrepreneur do?, in what context does the leader/entrepreneur operate? Corporate entrepreneurship research appears in the second stage of the life cycle approach and studies in this area mostly analyze the context where the entrepreneur/leader operates (Cogliser & Brigham, 2004). Cogliser and Brigham (2004) review also concluded that there are salient similarities between these two research streams with respect to past development and future direction; and recommended that entrepreneurship research should benefit from leadership research.

Ling, Simsek, Lubatkin, and Veiga (2008) studied the indirect effects of CEO's transformational leadership style in promoting corporate entrepreneurship. Specifically, it has been found that CEO's transformational leadership style promoted top management team's (TMT) delegation of responsibility, collective propensity of risk taking, and compensation based on long-term performance; thereby positively influenced corporate entrepreneurship (Ling et al., 2008). Similarly, Eyal and Kark (2004) studied different leadership styles and entrepreneurial initiatives in elementary schools and found that transformational leadership affects corporate entrepreneurship. It is also argued that transformational leadership will promote corporate entrepreneurship through being excited about innovation (Howell & Higgins, 1990).

Covin and Slevin (1991) studied top management values and philosophies as internal variables affecting entrepreneurial posture of the firms. Guth and Ginsberg

(1990) identified four concepts affecting entrepreneurship in organizations environment, strategic leaders, organization form or conduct, and organizational performance. The effects of strategic leaders have been emphasized in terms of leadership characteristics, values/beliefs, and behaviors. Hornsby, Naffziger, Kuratko, and Montagno (1993) also studied specific individual characteristics such as risk taking propensity, desire for autonomy, need for achievement, goal orientation, and internal locus of control as variables affecting the decision to act intrapreneurially in firms. Overall, while the literature that relates leadership to entrepreneurship in organizations is underdeveloped, there is agreement that leadership have an influence on the entrepreneurial capacity of firms.

Lastly, including outcome variables such as performance to the models developed in firm-level entrepreneurship literature will contribute to the development of the field and generate relevant results both for academicians and practitioners (Dess et al., 2003). Many authors study the effect of corporate entrepreneurship on firm performance and have shown that there is a positive relationship between the two concepts (e.g., Antoncic & Hisrich, 2001; Covin & Slevin, 1991; Lumpkin & Dess, 1996; Wiklund, 1999; Zahra, 1991; Zahra, 1993a). Among different performance variables the research usually studies firm-level entrepreneurship effects on growth and profitability.

The effects of firm-level entrepreneurship on company growth and profitability have been significantly established in the literature (e.g., Antoncic, 2006; Zahra, 1991; Zahra, 1993a; Zahra & Covin, 1995; Zahra & Garvis, 2000). Kaya (2006) studied 124 firms operating in diverse industries in Turkey to examine the

effects of human resource management and corporate entrepreneurship on firm performance. The authors measured firm performance through sales growth, market share growth, return on sales, return on assets, overall profitability, product/service quality, new/product service development capability, job satisfaction of employees, and customer satisfaction; and found that corporate entrepreneurship is a significant influencing factor of firm performance. Moreover, while many researchers analyzed only the direct effects of entrepreneurial activities on growth and profitability (Zahra, 1991; Zahra 1993a; Zahra & Covin, 1995), Antoncic and Hisrich (2004) analyzed the indirect effects and found a positive association as well.

Zahra and Covin (1995) also found support for the strong relationship between corporate entrepreneurship and financial performance, but noted that the financial benefit of engaging in entrepreneurial activities can be attained after a certain period of time. In other words, authors suggested that it may take several years for entrepreneurial activities to generate positive financial outcomes; therefore, research should notice the time-lag between the activity and the outcomes. Dess et al. (2003) suggested that future corporate entrepreneurship research should give emphasis to more intangible outcomes such as human, intellectual, and social capital. Recently, Phan et al. (2009) stated that corporate entrepreneurship contributes to a firm's competitive advantage and added that a stakeholder perspective is important in the analysis of organizational outcomes of corporate entrepreneurship such as its relationship with corporate governance.

Based on the above literature review the preliminary theoretical framework

of the research is developed (Fig. 2). The framework basically proposes that organizational culture and leadership influence firm-level entrepreneurship in the organization. The type of the organizational culture and the shared values of the organizational members are important components of organizational culture. Moreover, considering that the current research focuses on the firm-level of analysis, it is the leadership of the top management (e.g., the general manager, the chief executive officer (CEO), the owner) that is important for the analysis of leadership effects on firm-level entrepreneurship. Therefore top management leadership components such as dominant role and orientation of the leader and the strategy and goals the leader pursues are accepted as influencing factors of firm-level entrepreneurship.

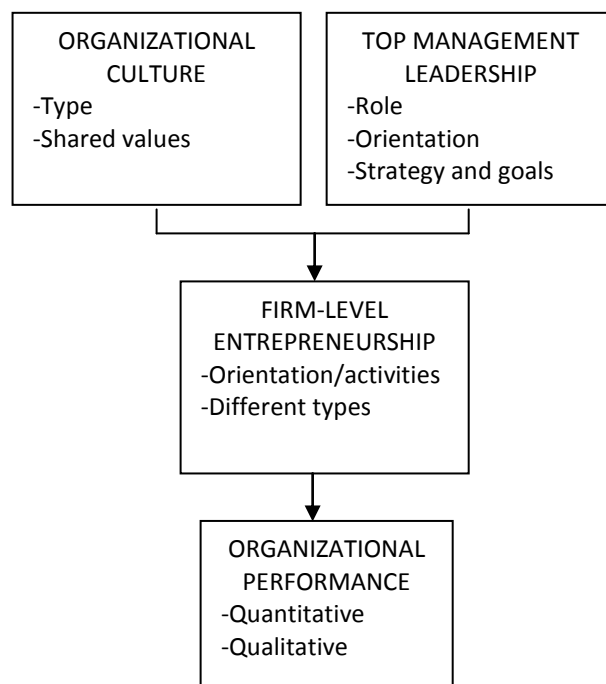


Fig. 2 Preliminary theoretical framework

Regarding firm-level entrepreneurship the distinction between orientation towards entrepreneurship and the actual entrepreneurial activities are an important concern. Moreover, the understanding the different types of entrepreneurial activities in the organizations is an important issues for the clarification of firm-level entrepreneurship concept. Lastly, the preliminary theoretical framework proposes that firm-level entrepreneurship affects organizational performance which has two main components of quantitative and qualitative performance.

Methodology

With the preliminary theoretical framework, the basic research questions and appropriate research methodology of the study is determined. Current research basically aims to find answers to the following research questions:

1. Does organizational culture and top management leadership influence firm-level entrepreneurship? If yes, how do they affect and what are the effects?
2. In explaining firm-level entrepreneurship can orientation towards entrepreneurship be differentiated from entrepreneurial activities? Are there any different types of entrepreneurial activities?
3. What are the consequences of firm-level entrepreneurship in terms of organizational performance?

This study will adopt both qualitative and quantitative methods to explain firm-level

entrepreneurship and its relationship with organizational culture, top management leadership, and organizational performance. The combination of qualitative and quantitative studies is suggested to develop a proper understanding of firm-level entrepreneurship, especially for understanding organizational level correlates (Zahra et al., 1999). Bryman (1988) suggested that combination of qualitative and quantitative techniques is especially necessary for knowledge development. Although there are epistemological differences between these two type of analysis (Bryman, 1988), the combination enables to develop more clear contextual understanding of firm-level entrepreneurship. Mail surveys are apparently a viable approach in collecting data, but multiple sources of data are needed for measure validation, hypotheses testing, and theory development. Therefore, field studies or interviews are also believed to be useful in understanding organizational level entrepreneurial activities (Zahra et al., 1999).

The main drive behind this combined method of data collection and analysis is triangulation where convergences of patterns are aspired at the end of data analyses. Jick (1979) develops a continuum of triangulation design and stated that the value of qualitative research in combination with quantitative research comes in complex research designs where there is contextual/holistic description of the phenomenon. Triangulation enables the researcher to achieve more valid and reliable constructs and proposed relationships.

Accordingly, in the following first qualitative research is presented in Chapter IV followed by quantitative research in Chapter V.

CHAPTER IV

QUALITATIVE RESEARCH

The use of qualitative methodologies is becoming increasingly important in entrepreneurship research (Gartner & Briley, 2002). Qualitative research methods enable researchers to get closer to the phenomenon under investigation and create richer and deeper data (Bryman, 1988). There are various methods of qualitative research like experience survey, insight stimulating examples, critical incidents, focus groups, and case studies (Churchill, 1979). In this chapter, first research design of the qualitative study is presented, followed by data collection section. Next, data analysis is presented which involves content analysis and concept development. The chapter then continues with results of the analysis and concludes with the discussion on findings.

Qualitative Research Design

In the qualitative part of this research design, case study method is adopted in order to have a deeper understanding of firm-level entrepreneurship and its organizational level correlates. Case studies are accepted to answer “how” and “why” questions where the researcher aims to develop a more in-depth analysis of

the research questions and aims to develop theory. For instance, Santos and Eisenhardt (2009) studied *how* entrepreneurs form their organizational boundaries and develop their markets through longitudinal case study of five companies. Eisenhardt and Graebner (2007) discussed the importance of theory building from case studies and stated that, “although sometimes seen as subjective, well-done theory building from cases is surprisingly objective, because its close adherence to the data keeps researchers honest.” (p. 25).

Yin (2003) discussed about three different types of case studies: exploratory, descriptive, and explanatory. The current case study analysis can be considered as both exploratory and explanatory. It is exploratory in the sense that it aims to understand firm-level entrepreneurship and it is explanatory in the sense that it aims to develop causal links between the concepts (e.g., leadership and firm-level entrepreneurship) in the study.

Eisenhardt (1989) stated that although it is not common to specify the constructs beforehand in qualitative research, it is often useful to determine the constructs and research questions before case studies, especially for construct validation and theory development. However, the researcher is suggested to note that all these previously developed constructs and questions are tentative in case studies (Eisendardt, 1989). Therefore, with the identified constructs and with initial theoretical framework of the study, the case sites are selected for further analysis.

While random sampling which is based on statistical sampling is the core issue in quantitative research designs, in case studies the central concern is theoretical sampling which emphasizes “representativeness”. Accordingly, cases

should be selected which provide extreme examples of the situation and where the process is clearly apparent (Eisenhardt, 1989). Eisenhardt and Graeber (2007) stated that cases are selected which are suitable examples of constructs and corresponding relationships under research. Therefore, the selection of the case sites is not based on the aim of statistical generalization but instead on their ability to replicate findings or develop a theory.

Another important issue in designing case study research is the decision to adopt single- or multiple-case designs. According to Yin (2003) case studies can be single vs. multiple or embedded (multiple levels of analysis) vs. holistic (single-level of analysis). While well analyzed single-case designs represent good examples of the concept under discussion, multiple-case designs are especially suggested for better construct validation and theory development (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). Yin (2003) suggested that multiple-case designs enable the researcher to achieve replication logic where each case replicates the other and the emerging theory and therefore are better in explaining the underlying relationships between constructs. Multiple-cases create more valid and generalizable theories that are deeply embedded in the empirical data (Eisenhardt & Graebner, 2007). Adoption of multiple-case designs is also useful for the study of firm-level entrepreneurship. Considering the ambiguity surrounding the firm-level entrepreneurship concept and its underdeveloped relations with organizational correlates, multiple case designs enable the researcher to get closer to the phenomenon from different perspectives and to clearly establish causal links. For instance, Parrish (2009) adopted multiple-cases for the study of organization design

variation in the sustainability of entrepreneurship.

Accordingly, the current study adopts multiple case research design.

Although an entrepreneurial story in each case site is constructed to understand firm-level entrepreneurship, the current research principally concentrates on the firm. Therefore, case study research design adopted in this study carries the elements of a holistic-multiple case design (Yin, 2003).

While multiple case designs result in more generalizable theories, theoretical sampling is more difficult when compared to single-case designs (Eisenhardt & Graebner, 2007). While extreme and unique cases are adopted in single-case designs, the key issue in multiple-case designs is the contribution of each case for theory development and extension (Eisenhardt & Graebner, 2007). Accordingly, purposeful sampling is adopted in this research (Denzin & Lincoln, 2000). There are two important criteria under consideration. Firstly, cases are selected on the basis of whether the companies are accepted as entrepreneurial companies in their industries or have an entrepreneurial story (e.g., new product introduction, new market entrance). Secondly, because the study combines qualitative and quantitative analysis, results are aimed to have consistency in terms of industrial context. Therefore, cases are chosen from the same industries that are sampled for the quantitative part of the study. Namely, cases belonged to manufacturing industries (heavy manufacturing and fast moving consumer goods (FMCG)) and service industries (finance and telecommunications).

According to Eisenhardt (1989) there is no ideal number of cases, but having a minimum of four cases is required to generate theory. The selection of cases is

primarily based on the acceptance by the company for access. In the current study, considering the difficulties of access and time restrictions, four case studies are included in the final design. Two companies are selected from manufacturing industry (one from heavy manufacturing - automobile - and one from FMCG - food) and two companies are selected from service industry (one from banking industry and one from telecommunications industry).

In order to understand firm-level entrepreneurship and its organizational correlates, an entrepreneurial story is analyzed in each company. A specific entrepreneurial story is required for the informants to elaborate on the organizational correlates of the entrepreneurial story. The details of the each case will be provided in the following data collection section. The pseudonyms of the company names, their main industries, year of founding, size in terms of number of employees, the firm-level entrepreneurship chosen for the case study, are given in Table 2.

Table 2. Case Study Companies

Company	ATRIA	DIPHDA	ELECTRA	SYRMA
Main Industry	banking	food	automotive	telecommunications
Founded	1997	1944	1968	1840
Size (number of employees)	1,915	29,500	2,555	35,000
Type of entrepreneurship	new product introduction	new business and new product introduction	international market expansion	corporate acquisition and new business

Data Collection

In case studies multiple methods of data collection is suggested to increase the

validity of findings (Eisenhardt, 1989; Yin, 2003). In the current study, interviews, observations, analysis of internal documents, Web sites, and external documents (such as newspaper information), and physical artifacts (such as office layout and dressing code) are included in the data set. The use of multiple methods also enables triangulation which increases the validity of constructs and the proposed relationships (Eisenhardt, 1989).

The most important source of data for the case studies is interviews. The interviews are conducted in the company sites. In each case, the first interview is conducted with the key informant, who is asked to suggest an “entrepreneurial story” and further possible informants who would be knowledgeable about it. The final group of informants for each case included more informants than the initial suggestion of the key informant. It included people that the researcher identified as appropriate to interview as the interviewing process evolved. The interviews are semi-structured in the sense that an interview protocol is available but mostly served as a checklist during interviews. In other words, the main general questions are asked and then the subjects are given a chance to describe the situation in their own way and even construct their own interpretation as suggested by Carrier (1996). The protocols that are used during the interviews are available in Appendix A. The average interview time is thirty minutes, within a range from twenty minutes to seventy five minutes. The data collection period lasted for approximately ten months (between May 2009 - February 2010). The statistics related to the number of interviews, total length of interviews, corresponding transcribed pages, and the key informants for each case are given in Table 3.

Table 3. Case Study Interviews

Company	Number of interviews	Total Length (hh:mm)	Transcribed pages	Key informants
ATRIA	10	05:26	34	General Manager and Department Heads
DIPHDA	8	03:37	27	General Manager
ELECTRA	8	05:20	29	CEO and General Manager
SYRMA	9	04:16	32	Department Heads of Strategy and Business Development Division

In addition to the interviews, field notes are taken as suggested by Yin (2003).

These notes comprised of information about the physical artifacts, clothing, office design, interview site, and attitudes of the subjects. Moreover, internal company documents such as yearly company reports and internal communication magazines are examined. The Websites of the companies are also analyzed for additional information. Also, newspapers and internet are searched for further information about the company's entrepreneurial initiatives.

In qualitative research, especially in case studies, data collection continues until saturation of data is achieved and additional information provides no further insights. Therefore in this study too, interviews and collection of secondary data are ended when the information from these sources provided no additional insight about the phenomenon.

Data Analysis

In this section, first content analysis will be presented with a background of the case study companies. The section will then follow with the concept development. Data

analysis is first carried out within each case. Following the interviews and the first impressions of the available data set, the entrepreneurial activities, the company culture and atmosphere, the leadership style dominant for each case looked quite different from each other. Therefore a within-case analysis is especially important to fully understand firm-level entrepreneurship and its organizational correlates for each individual case. Moreover, having an in-depth analysis of each case is essential to be able to draw generalizable patterns (Eisenhardt, 1989).

Content Analysis

The interview transcriptions, the field notes taken during case site visits, and internal/ external company documents are analyzed for each case. Each case is content analyzed to track the frequency of concepts or phrases mentioned during interviews. In the following part, the four cases will be presented in terms of the company's history, establishment, operations, current position in the market, organizational culture, leadership styles, entrepreneurial story and the content analysis results.

The ATRIA Company

ATRIA is a young and growing bank operating since 1997. It was bought from the Privatization Administration¹ in 1997 by a holding company, and only had 3 branches then. The holding company was established in 1956 and specializes in

¹ Privatization Administration is an organization that regulates the privatization of state-owned enterprises.

industrial gas production and distribution. It is the 9th largest company in terms of revenue and the 6th largest in terms of exports in Turkey. After the acquisition, ATRIA started operations in 1999.

ATRIA is now a medium-sized bank with 86 branches in Turkey. The bank operates in the commercial, retail, and agricultural banking segments and has currently four subsidiaries: ATRIA Securities, ATRIA International Banking Unit, ATRIA Nederland N.V., and ATRIA Factoring. The bank specializes in commercial banking and supports SME financing.

ATRIA's basic values are "trustworthiness, transparency, and high quality of service". With these values in mind, the bank aims to grow in accordance with the sustainable growth strategies of the company. ATRIA states its mission as "a bank respected in international markets, customer-oriented, innovative, effective in alternative distribution channels, and competitive in pricing". It gives high priority to innovation and product development. Customer orientation is one of the essential priorities of the bank through which it targets custom-made solutions to its customers in every segment.

During the financial crisis in Turkey in 2009, ATRIA was the only bank that opened new branches and continued to give credits to its customers. This is attributed to its sustainable and secure growth strategy determined by the holding company. ATRIA's organizational culture is considerably conservative due to the conservative style of the parent company culture. The strategies are clear and borders are well drawn. Company values "calculated-risk" and "it does not want to be everywhere every time". The management is currently trying to change its

organizational culture.

The cultural change is attributed mostly to the leadership style in ATRIA. The General Manager is apparently the sole leader of ATRIA. The leadership style is empowering and supporting innovation. The leader continuously emphasizes the importance of exchange of ideas and open communication channels. He is highly approachable and gives priority to flexibility. It is this type of leadership that led ATRIA to engage in entrepreneurial initiatives in the last couple of years.

After the financial crisis that Turkey experienced at the end of 1990's, the interest rates were considerably high. However, towards the end of 2000's the interest rates started to decrease. So, the period of high returns from time deposit accounts ended. Moreover, foreign exchange rate volatility is high in Turkey and customers are opportunistic with regard to the exchange rate differences. These circumstances led ATRIA to search for a solution for demanding customers who wanted to benefit from the exchange rate differences and also get higher returns from their time deposit accounts. The "Z account" was created with this aim.

In July 2009 "Z account" was initiated through a customer demand on which ATRIA worked on with a large team of experts. The product is a time deposit account where the customer can make investments for a period between 45 and 90 days in Turkish Lira, Euro, or US Dollar. The account enables the customer to switch between currencies whenever she/he expects a fluctuation without losing the accrued interest until that day. This was a new product for the Turkish banking industry and thus attracted great attention. As one of the division heads suggested, "the foreign banks operating in the market are working on this product to create a

revised version but have not commercialized a new version yet”. ATRIA gained from this product in multiple ways. First, it increased its revenues, but more importantly, it enhanced brand awareness among customers. As a company policy ATRIA does not emphasize advertising. This new product also stimulated brand equity and increased customer demand.

Currently, ATRIA preserves its conservative attitude while giving credits to its customers, yet it is aware that the only way to be “the best bank” as the company aims is through being “innovative and entrepreneurial” continuously. ATRIA aims to grow gradually in the near future and stimulate entrepreneurship in the bank to create a sustainable and reliable growth. The concepts that emerged in the content analysis of ATRIA are presented below in Table 4.

Table 4. Results of Content Analysis

Items and frequencies			
conservative/traditional	11	new service development	1
leadership affects entrepreneurship	7	competition orientation	1
Innovation	5	Ambition	1
sustainable growth	5	ambitious leadership	1
internal communication channels	5	competitive leadership	1
calculated risk	5	change oriented leadership	1
to create a difference	5	Intimate leadership	1
importance of qualitative performance	3	democratic leadership	1
cultural change	2	proactive leadership	1
idea suggestion channel	2	leader values employees	1
niche market opportunity	2	leadership easily accessible	1
empowering leadership	2	different idea generation	1
continuous change	1	dynamic young personnel	1
clear defined rules	1	hardworking personnel	1
speed in communication	1	to be the best bank	1
top management support	1	not clearly defined rules	1
customer orientation	1	devotion by personnel	1

The DIPHDA Company

DIPHDA is operating in the FMCG industry with a major focus on the food market.

The company was founded in 1944 in Istanbul by two brothers. It was initially producing only biscuits which then grew into a large holding company with diversified brands and business units. It is the largest manufacturer in the food industry and is currently among the “big 500 companies” of Turkey.

A few years after its establishment, DIPHDA opened a second factory and started delivery to Anatolia with no additional transportation costs added to the product price. In the following years, a new company was opened in Ankara and exporting started with its major focus as the Middle-East market. In the 1970s, DIPHDA started to produce chocolate and established a Research and Development Department to increase the company’s competitiveness in international markets. It continued to enlarge its product range in the 1980s and also made new investments for the production of its own manufacturing equipment. The initial efforts towards a more institutionalized structure were made through unifying the diversified investments of the company under umbrella of a holding company.

DIPHDA started to engage in innovative actions in the 1990s. Until the 1990s, the focus was on biscuits, chocolate and sweets, whereas the following years investments were made in other fields in the food industry such as margarine, vegetable oil, and industrial food oil market. It also established two foreign partnerships in line with its foreign expansion strategy. It then entered the milk industry in 1996.

However, the major turnaround in the company's history was observed in 2000 when the son of one of the founders took over the executive power in the company. Activities such as establishing partnerships with giant foreign partners, related diversification through investments in different areas of the food industry, and unrelated diversification in various industries continued at an increasing rate under the management of the younger generation. In 2001, DIPHDA entered the chewing gum, instant soup, and cooking additives markets. It also started to open factories in foreign countries. In 2002, baby food, Turkish coffee, and soft drink industries were their new market entry areas. In 2004, the company entered instant coffee market with a new brand and formed a new partnership with a famous world cereal producer in 2005. In 2007, DIPHDA acquired world's leading premium chocolate company. It also invested in bakery, tea, and frozen food industries. It diversified into personal care products, information technologies, and real estate industries. Thus, currently the company has grown into a diversified conglomerate.

DIPHDA currently has 29,500 employees working in 68 companies operating under eight divisions. The holding company now operates under eight main divisions: Biscuits and Chocolate Group; Food, Beverage, Confectionary and Chewing Gum Group; Packaging, Information Technologies and Real Estate Group; Food, Frozen Food and Personal Care Group; International Operations Group; Financial Services Group; Marketing, Strategy and Retail Group; Human Relations, and Legal Affairs, Trade and Media Purchasing Group. It also owns a foreign premium chocolate company. It exports to 110 countries around the world and

while retaining biscuits and chocolate as their main business activity, it expands its investments in diversified industries with a future aim to become a “global Turkish brand”.

“Everybody has the right to a happy childhood, no matter where in the world” is the vision of DIPHDA which places people and society as one of its highest concerns. Its brand strategy shapes its brands to be associated with good taste, good health, and rich nutrition and gives high priority to customer satisfaction, hygiene, and quality. The company defines its driving values as honesty, team work, customer focus, quality and technology, and autonomy. DIPHDA members define the essential drive behind their success as “dedication to succeed”. The fundamental force behind their successful and sustainable growth is attributed to their dedication to “do the best”. The widespread distribution channel system and its qualified and hardworking personnel give the company the chance to move rapidly. The members define the three most important attributes of their company as “power, success orientation, and flexibility”. DIPHDA always keeps the “quality concern” as the most important determinant of every decision. This strong quality focus combined with the dedication to do the best enables DIPHDA to grow and diversify into different industries successfully.

Currently, the Head of the Board of Directors displays a dominant leadership style at DIPHDA. The leader is perceived as brave, extremely smart, proactive, agile, and knowing every detail of the job. The informants continuously emphasized that if a business idea is well documented and supported, there is complete support from top management in terms of trial in the market accompanied by tolerance for

failure. The leader supports most of the innovative projects as long as “they sound right”. Due to his strong intuition, the projects that are selected for trial prove to be successful. The high rate of growth of DIPHDA and the entrepreneurial spirit in the company is heavily attributed to the proactive leadership style in the company.

It was this proactive leadership style that enabled DIPHDA to enter the instant coffee market in 2004. This investment required real courage as suggested by the General Manager: “The company had to have guts to do this!” The giant global company (referred as Company X here) dominated the Turkish instant coffee market to such an extent that its brand is used as the generic name for instant coffee. In 2000, Company X introduced “3 in1” instant coffee sticks in the market. At the time, DIPHDA had no initiative to be in the instant coffee business but it previously had a Turkish coffee experience which did not yield very satisfactory results.

DIPHDA planned to enter the “3 in 1” market, but there was a central question to consider: how will the company persuade the customer to try this new brand instead of the strong established global player’s brand? Two important decisions were made regarding this issue. First decision was to create a niche market opportunity with a new version of the current product as the “flavored 3 in 1”. The second decision was to open coffee shops for people to taste the product and generate awareness of this new brand. The brand name used was intentionally chosen to be different from the company’s umbrella brand (i.e., DIPHDA) in order to create a separate brand perception in the market. In line with this agenda, the first two coffee shops were opened in two busy districts of Istanbul. “Flavored 3 in 1”

instant coffee sticks entered the market in 2004.

The “flavored 3 in 1” product line is introduced with 3 different types; vanilla, caramel, and hazelnut. This product introduction was a real success. After the entry of DIPHDA products, the market grew by 130% and the competitor had to respond and follow by creating similar product variety but with unsuccessful results. The target market of the new brand is teenagers and young adults (ages 18-25 specifically). Accordingly, the brand targets university students and the advertising, marketing, and sales activities are organized to appeal to this young and lively target market. It has won the “The Best Direct Marketing Technique” given by Direct Marketing Association in Turkey and “Guerilla Activities” given by MediaCat magazine, with its marketing activity through which it distributed “3 in 1” product to university students with a lifting crane in university dormitories. In addition, the company also won the “Outstanding Website Award” in 2009 WebAward organized by The Web Marketing Association.

Currently, 88% of the instant coffee market is dominated by the “3 in 1” product line. The domination of the “3 in 1” line is expected to continue since it is accepted that consumer tastes are changing towards this practical form of coffee consumption. In this product line 75% is still composed by basic “3 in 1” category which is dominated by Company X, while the remaining 25% is composed of the “flavored 3 in 1” category dominated by DIPHDA. DIPHDA markets espresso, cappuccino, classic, gold instant coffee, and coffee cream under its new brand name. Currently DIPHDA’s new brand is the second player in the market and they aim to be the first in the future. Meanwhile, they currently have 34 coffee shops in

operation, offering different food and beverage product varieties and trying to influence and shape the coffee consumption pattern of Turkish customers. DIPHDA has a future vision to remove its competitor’s brand name from being used as the generic brand in the Turkish instant coffee market. As the Marketing Manager suggests “we really care not to use the competitor’s brand name as the generic name for coffee in our everyday business. If a visitor asks for coffee using the competitor’s brand as the generic name, we kindly respond by saying we don’t have that coffee”. The concepts that emerged in the content analysis of DIPHDA are presented below in Table 5.

Table 5. Results of Content Analysis

Items and frequencies			
Speed	10	leader takes the final decision	2
Innovation	9	proactive leadership	2
dynamic/adaptation capacity	9	clear leadership	2
the ambition to success and do the best	6	family culture	2
quality concern	6	Traditional	2
success, power, and flexibility	5	top management support	2
dominant leader’s vision	4	being a global player	1
tolerance for failure by the leader	4	market leader	1
leader knows all the details	4	direct marketing	1
niche market opportunities	4	entrepreneurship	1
Hardworking valued	4	vertical integration	1
high level of loyalty	4	competitive positioning	1
different distribution channels	3	different entrepreneurship activities	1
ambition to beat the competitor	3	Dedication	1
entrepreneurial leadership	3	horizontal integration	1
excitement in the atmosphere	3	Intention	1
go on, try it! Attitude	3	Insistence	1
Hybrid company culture	3	team spirit	1
Courage	2	Innovation meetings	1
Competition among departments	2	fast decision making	1
high qualified personnel	2	brave leader	1
Opportunity recognition	2	intelligent leader	1
self-belief	2	idea exchange with the leader	1
internal communication and sharing	2	entrepreneurial spirit	1
Hierarchy	2	results orientation	1
idea generation channels	2	strategy and marketing orientation	1
recognition of ideas	2	few rules	1
to think “like” the leader	2	beyond capability thinking	1
dominant leadership	2	rewards system	1

The ELECTRA Company

ELECTRA is a leading company in the automotive industry. It is owned by one of the largest conglomerates in Turkey which has diversified business units in industries such as cement, energy, food, retailing, textile, automotive, financial services, tire production, and trading. ELECTRA operates under four main divisions of bus and coach, truck and automotive, construction machinery, and international marketing and sales. Currently, the company owns ELECTRA Europe, ELECTRA Egypt, ELECTRA Austria, ELECTRA Deutschland, Omnibusland, and ELECTRA R&D and Technology companies.

ELECTRA has a market distribution agreement with one of the world's leading Japanese manufacturer of cars, panel-vans and commercial vehicles since 1984 and another market distribution agreement with a Japanese manufacturer of construction equipments since 1983. In 1987, ELECTRA started coach manufacturing in its first production facility in Adana. In 2008, two new plants started operation in Adapazarı and Egypt. Egypt plant specializes in the manufacturing of buses and coaches for demands from North Africa, the Middle East, and Gulf countries. Adapazarı plant specializes in the manufacturing of heavy and light trucks. ELECTRA also founded a Research and Development Company in TUBITAK (The Scientific and Technological Research Council of Turkey) MAM (Marmara Research Centre) Technology Free Zone in order to manufacture innovative and technologically improved buses and coaches.

After 2002, ELECTRA started exporting to the European market under its

own brand name, and has since proved itself as one of the leading independent coach manufacturers of Europe. Approximately 80% of its total exports are made to the European market. ELECTRA exports only buses and coaches and 75% of its buses and coach production are exported. In the European market, ELECTRA conducts its operations under the name of “ELECTRA Europe” in Belgium. It also has after sales services in Austria and Germany. The company has 10 sales representative offices all around the world and have a strong international network of marketing, sales, and especially distribution activities in 44 countries. ELECTRA’s success in the export market has been awarded with the “Busbuilder of the year” in Busworld Kortrijk Fair in 2008.

ELECTRA’s vision is “to be a world class global brand” and its mission is “as a commercial vehicle producer, together, we create innovative solutions for the customers”. It operates within Total Quality Management and Six Sigma systems. As stated in the company website, ELECTRA gives high priority to quality, environment, occupational health, and safety. ELECTRA first wants to be regional power and then to become a global power. The holding company owning ELECTRA is considerably conservative and risk-averse. Yet, ELECTRA differs from the holding company in several ways especially after the influence of a new General Manager who is currently the Chief Executive Officer (CEO) of the company. For instance, ELECTRA is very fast in decision making and it has very bold attitude in relation to engaging in risky business compared to parent company.

ELECTRA emphasizes lean management and empowerment in the organization. The employees are knowledgeable about their job and take

responsibility as if they “own the business”. Besides the sense of owning the business, the members also feel they “own the company” and they are inspired by the “dedication to succeed”. In other words, “ambition” is what defines the company. For ELECTRA, “courage” is highly important especially when the company engages in risky business decisions. Risk taking is welcomed and there is a high-level of tolerance for failure. ELECTRA knows that every risk has a cost and in order to grow one needs to dare to take action. It is a result-oriented climate and employees are expected to focus on finding solutions rather than presenting problems. In this ambitious, risk taking and result-oriented context, another differentiating characteristic of the company is their rapid decision making across the levels of the hierarchy and across issues.

ELECTRA perceives itself as an entrepreneurial company through emphasizing the high product introduction rate of the company. It introduces a new product every year in the world’s famous automotive fairs where the average rate of new products is every 2 to 3 years. In the last 4 years, the operations and products of ELECTRA has spread to around 45 countries. It has a web-based “recommendation system” where employees can submit their creative ideas related to product improvement or any other innovative solution they perceive to be beneficial for the company. Every month the best idea is selected and rewarded by the CEO of the company. This activity both stimulates idea generation and increases loyalty and motivation of employees. The communication channels are wide open in ELECTRA and people are in continuous interaction with each other. They have a special database where every business related activity and issue (e.g.,

order, customer request) is entered into the system which makes it possible for everybody to be informed about the activities in real time. Such systems can only work and be successful with contributions from employees, and employees at ELECTRA contribute with passion.

ELECTRA is in a market where it competes with the largest automotive manufacturers of the world. Therefore, the challenge it faces is very high which increases the importance of entrepreneurship for ELECTRA. It needs to differentiate itself in the eyes of the customer. Thus, the company pursued a customer-focused production and marketing strategy in the export markets where the world class brands are very strong players. It was this strategy which gave an impetus for the entrepreneurial story of the company.

In 2001, ELECTRA was severely hit by the economic crisis in Turkey. Until then, the company was selling its products solely in Turkish market and it felt no need to engage in international operations because the domestic market demand was sufficiently high. Moreover, interior mechanization of the buses and coaches were not in line with the regulations of the European market and the agreement with the Japanese company was inhibiting them to make changes to the product design. After the depreciation of Turkish lira and diminishing demands in the home market, ELECTRA had to downsize by 75% and it was on the verge of ending its operations and closing down its plants. It was at this time that the current CEO was appointed as the General Manager and took charge of the situation.

The General Manager foresaw the fact that exporting was the only choice for ELECTRA. It was really tough to sell the idea and persuade the conservative and

risk-averse parent company management to engage in new product development suitable for the European market and export to Europe where ELECTRA had no previous experience. The bus and coach market is characterized as a difficult market due to different regulation systems of countries and different consumer tastes. While Turkish customers prefer large buses, these are not welcome in France where the interior design is given higher priority. Through persistence, the leader was successful in persuading the parent company management and ELECTRA participated in the two most important automotive fairs of the world in Europe.

ELECTRA had no suitable products ready for the European market, but it displayed its buses which were a great success in Turkey only to create the awareness that there is such a Turkish company that can manufacture such a bus. They were displaying “their image” which they wanted the Europeans to buy. The strategy worked and ELECTRA received 75 bus orders in 2001. The employees worked with passion to design a bus to fit the demands of the European market and recover the company from the downturn situation. In 2002, 200 orders were received and ELECTRA started its journey in the international markets.

The entrance of ELECTRA to the international markets is totally attributed to the courage and risk-taking characteristics of the leader. The leader foresaw that the only choice for ELECTRA was being an export-oriented company to rescue itself from the economic crisis. The leader was successfully able to change the company atmosphere and make employees believe that ELECTRA can do it. The internal environment has changed dramatically after the new management of the new General Manager. However, after the global economic crisis that the world

observed in 2009, the company is severely affected in the international markets also. The high level of customization and international investments (international sales offices, Egypt plant, etc.) worsened the situation in the company. In the near future, ELECTRA plans to engage in less risky business, increase cash flow to the company and slow down the investments in order to reduce the effects of the economic crisis on its operations. The concepts that emerged in the content analysis of ELECTRA are presented below in Table 6.

Table 6. Results of Content Analysis

Items and frequencies			
Speed	10	hierarchical structure	1
Courage	8	easily accessible leader	1
product development	4	passionate leader	1
Agile	4	dominant leadership	1
risk taking	4	entrepreneurial leadership	1
tolerance for failure by the leader	3	independent leadership	1
idea suggestion channel	3	fast decision making	1
empowered personnel	3	motivating leadership	1
ambition to success	3	transparent leadership	1
lean management	2	“we can do”	1
family culture	2	to score a goal”	1
leadership effects entrepreneurship	2	entrepreneurship	1
internal communication channels	2	create differentiation	1
results oriented	2	owning the business	1
entrepreneurial spirit	2	Intention	1
not traditional	2	do it and go on	1
self-belief	2	Innovative	1
to think like the leader	2	Ambitious	1
being a global brand	1	rewards	1
few rules	1	Passion	1
dominant leadership	1	Hardworking	1
Proactiveness	1	opportunity recognition	1
top management support	1		

The SYRMA Company

SYRMA is operating in the telecommunications industry and it has the monopoly

power over the fixed line communication operations of Turkey since 1840. In 2005, SYRMA was privatized and 55% of its shares were sold to a foreign telecommunications company. In 2008, the company made its first public offering which was the biggest public offering in Turkey and seventh largest in the world. Currently, 55% of the company shares are still owned by the foreign partner, 30% is owned by the Undersecretariat of Treasury of Turkey, and 15% is owned by the public.

After privatization, SYRMA started to make investments in information and convergence technologies and acquired subsidiaries in different fields. Currently, SYRMA, as a communication and convergence technologies company, is the only group of companies that provide fixed line and mobile communications, and internet services to the customers and it operates as eight subsidiaries. SYRMA, which is the parent company, is the fixed line communication in Turkey. SYRMA currently owns the leading internet service provider in Turkey and 81% of shares of one of the GSM operators in the country. It has also acquired application solutions and software and information technologies companies also. More recently, it acquired an education and information technologies and a game development company. Lastly, it has established its own call center company which provides services to both its own customers and to other companies.

SYRMA's mission is "to provide customer-focused integrated communication solutions to customers anywhere and anytime" and it states its vision as "to be the preferred communication operator carrying to the future". The company defines its values as customer-focused, trustworthy, innovative, responsible, and dedicated

and they define their strength as solidarity and team spirit. SYRMA's motto is "Technology for Customers" and it aims to create innovative and integrative solutions in the market while benefiting from its strong infrastructure.

Privatized companies usually experience a strenuous cultural adaptation time where the public company goes through a change process in which mentality is harmonized with the new business. This process still continues at SYRMA.

Although it has been approximately five years after the privatization, the cultural adaptation process seems to be working rather slowly in the company. There are basically two groups of organizational members. The first group is the old hand, who worked for the public company for years, accumulated a huge amount of experience and developed their own way of doing business. The second group is the newcomers, who joined the company after privatization, especially in the last three years, who are more innovative, value empowerment, team-work, and risk-taking. The company first observed a friction between these groups followed by a convergence period. However, the employees perceive themselves to be at the beginning of the convergence process, which seems will take a long time judging from its slow pace until now.

The company approximately has 35.000 employees and accordingly a hierarchical structure influences the company culture and especially the operational division. Bureaucracy is quite heavy in the company, especially among the old hand and it is admitted that the newcomers somehow started to get accustomed to some "appealing aspects" of bureaucracy such as requiring subordinates to get the supervisor's approval even when not necessary. SYRMA experiences a dominant

leadership style. The General Manager pursues a top-down decision making process and is both “business” and “speed” oriented. He does not closely supervise the daily operations but is mostly concerned with strategic decisions such as acquisitions, major pricing and positioning strategies. Entrepreneurship in the company is stimulated by the leader. The leader acts in an entrepreneurial way and is very proactive especially in corporate acquisitions.

Telecommunications industry is experiencing an increased level of competition all around the world. Everyday fixed line operators are losing their market share to mobile operators. Observing this trend, SYRMA is aware of the fact that, it can not preserve its current position in the market and continue benefiting from the revenues gained through fixed line operations. Accordingly, SYRMA engaged in acquisitions in different fields of information and communications industries to keep its market position.

There are diverging views about the entrepreneurship level of the company among the organizational members. Before privatization, the company was not entrepreneurial at all. However, after privatization, three departments were formed under the division of Strategic Planning and Business Development and directly reported to the General Manager of the company. The departments under this division are considerably loosely structured when compared to the dominant hierarchy in the company. The main aim of these divisions is to pursue business opportunities in different industries such as education, finance, and health and establish partnerships. The employees working in these departments are innovative, empowered, and creative and continuously pursue entrepreneurial

opportunities. Currently, entrepreneurship in SYRMA is manifested through acquiring start-up entrepreneurial companies.

One of these acquisitions was an education and information technologies company. This company was established in 1988 as a laboratory in TÜBİTAK. It was then privatized in 1996 and started specialization in computer supported education contents. The first product of the company was launched in 1998 as a package of 40 CDs which included tests and education content for students preparing for the university entrance exam. After the success of this product, the company concentrated on education software and developed another product targeting primary school students. At the end of 2007, SYRMA acquired the company and “Vita” was developed as an internet-based education program.

SYRMA markets “Vita” not only with its own internet system provider company but also with other internet system providers (ISPs). Currently, the company has a subsidiary in the United States and operates in Malaysia, China, and in UK with various adapted versions of the product. In the United States, the company’s product won the annual SIIA (Software and Information Industry Association) CODIE prize as the “Best Education Company”. The company also received the “Best Content Service” award given by World Communication in 2009.

“Vita” is an interactive education software which provides education to primary school students (for grades 4-8) in four main subject areas (mathematics, science, Turkish language, and social studies). It can be used by both teachers and students. All the books of the Ministry of National Education that are taught in schools are available on its website. Through subscription, students can read books,

solve problems, and get interactive help and contact with others in the system. Teachers can upload their course notes, give homework to the students from the system and can contact them online anytime. One of the applications of the system is the online high school entrance exam tests where students can take the exam online at the same time with all other students in Turkey and then compare the results. As part of “Full Support for Education” social responsibility project, SYRMA donated “Vita” to schools through its partnerships with the Ministry of National Education.

Although SYRMA still earns most of its revenues from fixed line operations, the company is aware that the only way to compete is to be entrepreneurial. Accordingly, it aims to continue its investments in entrepreneurial activities in acquired companies and create innovative solutions to the market and even make more new acquisitions. The concepts that emerged in the content analysis of SYRMA are presented below in Table 7.

Table 7. Results of Content Analysis

Items and frequencies		
empowerment started very recently	3	Bureaucracy 1
abundance of ideas	3	dominant leadership 1
leader is sole decision maker	3	ideas coming from different channels 1
hybrid culture	2	top management support 1
conflicting cultures	2	aggressive leadership 1
slowly changing culture	2	top-down management 1
hierarchical culture	2	proactive leadership 1
growth orientation through acquisitions	2	results oriented leadership 1
corporate acquisitions	2	strategy and acquisitions focus 1
niche market opportunities	2	strict leadership style 1
Creativity	2	idea champion 1
leader stimulated entrepreneurship	2	Speed 1
establishing partnerships	2	opportunity recognition 1
public culture	1	differentiation is important 1
risk taking	1	robustness 1
business development orientation	1	

This content analysis part of this section provided detailed information about case study companies. In the next part, the concepts that emerged out of analysis will be focused on.

Concept Development

In case studies the aim is to have analytical generalization which is based on replication logic (Yin, 2003). The replication logic is especially important for multiple case sites (Eisenhardt, 1989). The replication can be literal where the same results are attained in each case and theoretical where opposing results are attained for expected reasons (Yin, 2003). In the current study, after each within case analysis, cross case comparisons are conducted. The aim was to find similar constructs in all cases (Eisenhardt & Graeber, 2007). Eisenhardt (1989) suggested two techniques for cross case comparisons. First, some dimensions and constructs are identified that are repeatedly emphasized for each case (e.g., speed, risk taking) and then individual cases are analyzed with respect to identified dimensions to ascertain similarities or differences. Second, cases are analyzed pair-wise with the aim of finding converging and diverging patterns. Yin (2003) suggested that replication logic also increases external validity of the constructs and enable the researcher to develop a more generalizable theoretical framework.

Accordingly, the analysis of the data revealed seven main concepts to explain entrepreneurial activities in organizations and their organizational correlates: dimensions of firm-level entrepreneurship, types of entrepreneurial

activity, organizational culture/shared values, top management leadership, internal mechanisms, strategic orientation, and organizational performance.

While *characterizing entrepreneurial activity*, the most frequently emphasized dimension was “innovation”. Informants have a tendency to equate innovation with entrepreneurship in organizations. For them, when a company innovates (e.g., develops new products, enters into different market segments) then it must be entrepreneurial. “Proactiveness” is perceived also as one of the essential dimensions of firm-level entrepreneurship. Thinking beyond current capabilities, beyond current products or markets of the organization and finding new opportunities before others is what informants define as proactiveness. “Risk taking” is emphasized as the inevitable dimension of firm-level entrepreneurship. According to them, an entrepreneurial activity is undeniably new and therefore involves risk. Companies need to take risk and assume the associated cost of the entrepreneurial activity. This risk can be minimized - what they define as calculated-risk - through market research and feasibility tests of the entrepreneurial activity. But whether it be calculated or not, entrepreneurial activity is definitely perceived to involve risk. “Speed” is another repeatedly emphasized dimension that characterizes entrepreneurial activity in companies. When an opportunity is recognized, this has to be turned into reality quite fast before competitors or before it loses its attractiveness in its market segment. Although not as frequently as other dimensions, differentiation, competition, and change orientation are also emphasized for characterizing entrepreneurial activity in companies. Being different from competitors, acting before competitors, and being adaptable to

changing conditions enable companies to engage in entrepreneurial activities more easily. Table 8 gives the details of the way these different dimensions of entrepreneurial activity are mentioned in each case.

Table 8. The Dimensions of Firm-Level Entrepreneurship

	ATRIA	DIPHDA	ELECTRA	SYRMA
innovation	important dimension of entrepreneurship	Important dimension of entrepreneurship an important dimension of entrepreneurship	one of the dimensions of entrepreneurship	one of the dimensions of entrepreneurship
proactiveness	not mentioned	dimension of entrepreneurship	one of the dimensions of entrepreneurship	one of the dimensions of entrepreneurship
risk taking	not associated with entrepreneurship, avoided as a company orientation	Inevitable dimension of entrepreneurship	inevitable dimension of entrepreneurship	not mentioned
speed	requirement of the industry	mentioned very frequently	mentioned very frequently	not mentioned
differentiation orientation	valued too much	not mentioned	not mentioned	not mentioned
competition orientation	company's strategic orientation	company's strategic orientation	company's strategic orientation	company's strategic orientation
change orientation	mentioned very frequently	mentioned very frequently	not mentioned	not mentioned

It has been observed that, while the informants cannot easily differentiate between different “types” of entrepreneurial activity when asked directly, the analysis of data revealed that there are different types of entrepreneurial activities given as examples by the informants as part of the entrepreneurial story they constructed. While the interviews mainly focused on an entrepreneurial story in each case, during interviews different entrepreneurial activities are mentioned. The entrepreneurial activity types observable in the data are: new product/service introduction (e.g., “Z account” introduced by ATRIA), new distribution channel (e.g.,

opening up its own warehouses instead of using distributor’s warehouses by DIPHDA), market expansion (e.g., entering African market by ELECTRA), new business in related industry (e.g., entering in-city coaches market by ELECTRA), new business in new industry (e.g., entering information technologies business by DIPHDA), and corporate acquisition (e.g., acquisition of digital game company by SYRMA). The frequency of each activity for each case is presented in Table 9.

Table 9. Type of Firm-Level Entrepreneurial Activity

	ATRIA	DIPHDA	ELECTRA	SYRMA
new product/service introduction	low	high	high	low
new distribution channel	not present	high	low	not present
market expansion	Low	high	medium	low
new business in related industry	Low	high	medium	low
new business in new industry	not present	high	not present	medium
corporate acquisition	not present	high	not present	high

The analysis revealed that, when informants are asked to define their *organizational culture* they could not easily *define* it, but instead, they mainly expressed the prevailing shared values in the organization. In other words, the concept of culture is considerably ambiguous for organizational members. In three of the cases, culture was changing or was in a process of being shaped by the top management. In only one case (ELECTRA), there was a strong organizational culture due to the existence of the strong parent company culture but still the informants had difficulty in defining it. The dominant culture, basic values that tie the

members of the organization, whether the culture is changing or trying to be established, the basic feature of culture, the ambition, self-belief, and entrepreneurial spirit are identified as relevant dimensions of the concept. In Table 10 the resulting dimensions are detailed for each case.

Table 10. Shared Values/Organizational Culture

	ATRIA	DIPHDA	ELECTRA	SYRMA
dominant culture	conservative	Dynamic	Passion	hybrid but mostly hierarchical and bureaucratic
basic values	not mentioned	“doing the best” “ambition to succeed”	“we can do” “ambition to succeed” Strong	not mentioned
current status	culture is changing	trying to shape organizational culture	organizational culture due to strong holding company culture	changing very slowly after privatization
differentiating characteristics of culture	competition-oriented	Courage	Courage	friction of diverse sub-cultures
ambition	very dominant	Extremely dominant	Extremely dominant	not mentioned
self-belief	not mentioned	Extremely dominant	very dominant	not mentioned
entrepreneurial spirit	not mentioned	highly present	highly present	not present

The importance of *top management leadership* style in stimulating entrepreneurial activity in the companies is frequently emphasized in each case. Informants are able to easily define the top management (the general manager or the head of board of directors) leadership style in their organization. The role, basic orientation, management style, dominance in the company, decision making, empowerment, proactive, hardworking, and courage are identified as the dimensions of leadership. The details of the dimension for each case are given in Table 11.

Table 11. Top Management Leadership

	ATRIA	DIPHDA	ELECTRA	SYRMA
role	supportive	entrepreneurial	Passionate	idea champion
basic orientation	competition and people orientation	competition and results orientation	not mentioned	strategy and results orientation
management style	democratic	visionary and top-down	Supportive	top-down
dominance	owns the business	Very dominant, knows every detail	Dominant	very dominant but does not know every detail
decision making	not mentioned	Very fast mostly based on intuition and market testing	very fast	very fast
empowerment	high level of empowerment	not mentioned	mentioned as an important attribute of leader	not mentioned
proactive	not mentioned	especially mentioned	especially mentioned	mentioned as an important attribute
hardworking	not mentioned	especially mentioned	especially mentioned	not mentioned
courage	not mentioned	Very courageous "try it, go on!" perspective	very courageous "try it!" perspective	not mentioned

Internal mechanisms are another concept that emerged during data analysis (see Table 12). These mechanisms involve the internal communication channels, the idea generation system, the existence of top management support, rewards and reinforcement, and tolerance for failure. Internal communication channels involve both formal (e.g., regular meetings) and informal channels (e.g., get together). Idea generation system is a web-based system that members of the organization can regularly enter their *new ideas* (e.g., a new manufacturing technique for cost reduction). The ideas in the system are evaluated by a committee and there is a reward for the winning idea. Top management support involves support from the top regarding idea generation and experimentation of the idea. Rewards and reinforcement involves the existence of these mechanisms especially regarding the

initiation or success of an entrepreneurial activity. Tolerance for failure involves whether there is high/low level tolerance in the company especially regarding the risks involved in entrepreneurial activities.

Table 12. Internal Mechanisms

	ATRIA	DIPHDA	ELECTRA	SYRMA
internal communication channels	very strong	Very strong	very strong	problems of internal communication
idea generation system	present and works well	present and works very well	present and works very well	not present
top management support	felt very strongly among employees	present "go on!" perspective	observed strongly	not present
reward and reinforcement	present but not very frequent	present and works well	present and works well	not present
tolerance for failure	low level	High level	high level	not mentioned

Strategic orientation emerged as another important concept determining the entrepreneurial activity scope (see Table 13). The strategic orientation involves the vision (e.g., being a global player), the basic drive (e.g., the dominant motive behind the grand strategy), and the business-level strategy.

Table 13. Strategic Orientation

	ATRIA	DIPHDA	ELECTRA	SYRMA
vision	to be the best bank	to be a global Turkish brand	to be a global market player	to be a global brand
basic drive	Does not want to be everywhere every time	very strong growth orientation niche market	not clear	not clear
business-level strategy	Niche market opportunities	opportunities and diversification through acquisitions	market expansion and product line extension	acquiring new ventures and diversification

Organizational performance is found to be another important concept in relation to entrepreneurial activities (see Table 14). Two categories of performance emerged in the data analysis: financial and qualitative performance. Financial performance involves the financial returns (e.g., return on investment) and market performances (e.g., market share) while qualitative performance involves intangible forms of performance that are not easily quantifiable (e.g., customer equity).

Table 14. Organizational Performance

	ATRIA	DIPHDA	ELECTRA	SYRMA
financial performance	sustainable growth	financial and market performance	financial and market performance	financial and market performance
qualitative performance	values customer awareness and brand equity	values loyalty	not mentioned	not mentioned

Results

In this section, with the developed concepts in concept development part of data analysis section, the conceptual framework of the qualitative research is presented. Next, case portrayals are discussed to present how emerging conceptual framework works in each case.

Emerging Conceptual Framework

Tentative relationships are established among the identified concepts, as suggested by Ozcan and Eisenhardt (2009). It is found that the most important antecedent of

entrepreneurial activity in organizations is top management leadership. When the leader values entrepreneurship then the organization is geared towards any form of entrepreneurial activity. Shared values/organizational culture are also found to be influential on entrepreneurial activity. However, this effect is predominantly determined by the leader. In other words, the leader shapes and establishes the culture/ value system of the organization and these, in turn, affect the emergence of the entrepreneurial activity. Moreover, the existence of internal mechanisms is found to be facilitating the emergence of entrepreneurial activity in the company. The entrepreneurial activity is found to be also affected by strategic orientation. For instance, when the strategy of the company is to be everywhere every time, it is then more likely that it engages in market expansion. Regarding consequences, entrepreneurial activity is suggested to be positively affecting the performance of the organization although the scale of this effect varies depending on the success of the activity.

These initial relationships are then verified continuously by referring each case to find similar patterns which is basically the replication logic. The data analysis method is explanation-building (Yin, 2003) where the data is analyzed with the aim to build an explanation about the case. Based on this iterative process, it has been found that the contextual determinants and consequences of entrepreneurial activity *changes* depending on the entrepreneurial activity. For instance, while internal mechanisms are found to be reinforcing new product introduction in the company, it has no direct and strong relationship with new industry entrance. This reasoning also supports the view that there are different

types of entrepreneurial activities in companies. Accordingly, the analysis of different types of entrepreneurial activities generated two main types. The first type includes new industry entry and corporate acquisitions. These activities are related more to the corporate-level decisions of the companies. The second type incorporates new product/service introduction, new distribution channel, market expansion, entrance in new business in related industry. These activities are related more to business-level decisions. The analysis also revealed that the first type of entrepreneurial activities is more “beyond-boundary” of the firm. The term “beyond-boundary” is used in the sense that these activities are outside the scope of the current activities of the company. The second type, on the other hand, is more “within-boundary” of the firm. In other words, the range of these entrepreneurial activities is more within the scope of the current activities of the company.

Accordingly, two frameworks of entrepreneurial activity emerged after the data analysis. In the *beyond-boundary focus entrepreneurial activity framework* (see Fig. 3), the entrepreneurial activity is directed towards moving beyond the current operations of the company. It is innovative, proactive, and involves risk. In this framework, the company wants to grow and this growth orientation is not limited to its current domain of operations and includes diversification in unrelated industries. It may establish a new company from the start with its own resources or it may choose to acquire a new firm. Accordingly, the strategic orientation which emphasizes having a global vision and diversification is a key factor in this type of entrepreneurial activity.

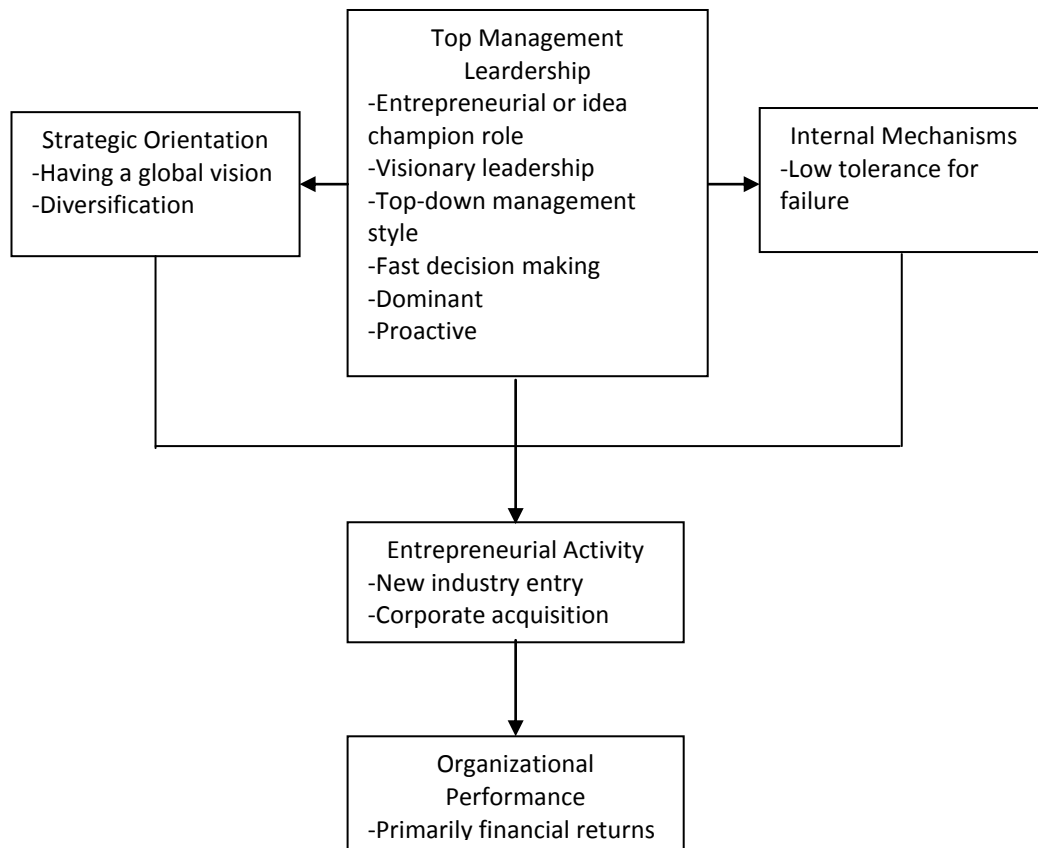


Fig. 3 The beyond-boundary focus entrepreneurial activity framework

The leader has an entrepreneurial or an idea champion role in this framework and acts as a visionary leader. With the vision of having a diversified global company, the leader evaluates every business opportunity. The leader is proactive; he/she captures every business idea, evaluates it, and turns it into reality. The leader often has a top-down management style and a strong dominance in the company and usually prefers fast decision making. When a business idea is recognized and accepted, action is taken immediately. Moreover, there is very low tolerance for failure because the relative amount of investment compared to the within-boundary focus entrepreneurial activity is quite high. Although the initial investment decision is fast, it is strongly based on intuition (which usually proves to

be right because the leader here is very capable of sensing the “right” opportunity) and feasibility tests (carried out immediately after the recognition of the idea). The outcome of this entrepreneurial activity directly affects the financial performance of the company. Actually, the company engages in this type of entrepreneurial activity with the aim of having higher financial returns (investments are not likely to be made in unprofitable business). The entrepreneurial activity may also increase qualitative performance. However, the major effect is on the financial structure of the company in this framework.

In the *within-boundary focus entrepreneurial activity framework* (see Fig. 4), the entrepreneurial activity is within the current scope of the activities of the company. In other words, in this framework, the company acts entrepreneurially in the boundaries of its current industry. Entrepreneurial activities in this framework are still characterized by innovativeness, proactiveness, and risk taking. But in addition to these, there is significant importance of speed and differentiation focus with respect to the characteristics of entrepreneurial activity. However, the most important differentiating factor in this type of entrepreneurial activity is the importance of shared values and internal mechanisms supporting entrepreneurship. In other words, the company needs more than entrepreneurial thinking by the leader. Here, the company acts entrepreneurially as a whole. Therefore, the leader needs to create an organizational culture that stimulates entrepreneurship across the company.

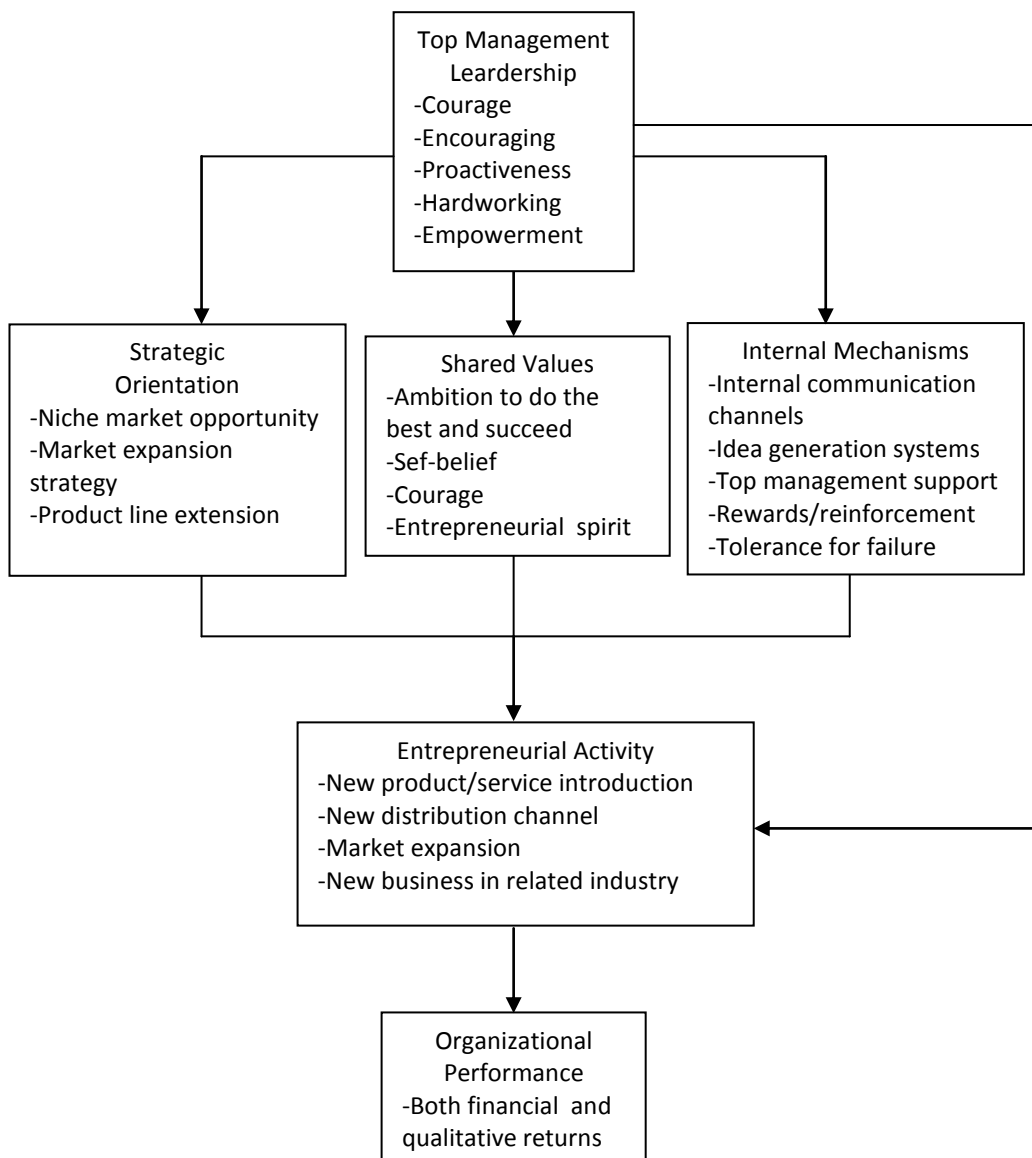


Fig. 4 The within-boundary focus entrepreneurial activity framework

The leader in this framework is courageous, proactive, encouraging, and empowering. He/she has the courage to try new things and encourages organizational members to try their new ideas and turn them into business opportunities. He/she empowers organizational members so that they take risks and engage in entrepreneurial activity. The leader is very hardworking, present in

the company everyday, and knows every detail of his/her job. It is also such behaviors of the leader that make the organizational members follow the leader and pay attention to developing entrepreneurial ideas.

The strategic orientation of the company in this framework is more focused on finding niche market opportunities, expanding current markets, and extending product lines. The entrepreneurial activities in this framework are stimulated more by business-level strategies. Accordingly, the participation of organizational members in the entrepreneurial activities is required which augments the importance of shared values. The most essential component of the shared value system is the ambition to do the best and to succeed. Organizational members believe that their company needs to do the best which is a sign of their ambition. Moreover, they have a high level of self-belief and courage. Organizational members trust their company and know that their company has the capability and the courage to achieve anything they aim for. Accordingly, the entrepreneurial spirit spreads all around the company to every part of the structure. Employees continuously search for new entrepreneurial opportunities.

In addition to the shared values supporting the entrepreneurial activity, an internal mechanism that feeds the entrepreneurship spirit is also highly influential in this framework. Internal communication channels are wide open so that members can exchange ideas on a continuous basis. There is an idea generation system the output of which is repeatedly evaluated and rewarded through reinforcement mechanisms. In this framework, there is high level of top management support for entrepreneurial activities so that members can be part of

the process without being fearful about making mistakes. In line with this supportive environment, there is high tolerance for failure which facilitates the whole entrepreneurial process.

The entrepreneurial activities in this framework have an effect on both financial and qualitative performance. In other words, qualitative performance is given more importance in the current framework. The reason for this is that, here, the company especially wants to be perceived as different by the customers, be able to act before its competitors, and value the loyalty of its employees because of the need to ensure their involvement in the process.

A major point about these frameworks is that they are not mutually exclusive. For instance, existence of internal mechanisms that support entrepreneurship may influence the emergence of a corporate acquisition (e.g., an employee idea about entering into an unrelated but opportunistic industry may be channeled to top management and a new industry entry may occur).

In conclusion, the two frameworks of entrepreneurial activity presented here have different antecedents and consequences. Although the developed theoretical frameworks are not mutually exclusive, the importance of concepts changes significantly between the two types of activities. While dominant, top-down, entrepreneurial leadership is clearly visible in the beyond-boundary focus framework, there is a more empowering and encouraging leadership in the within-boundary activities. Moreover, while the strategic focus is concentrated more on diversification and growth in the beyond-boundary focus framework, it is focused more on differentiation and market expansion in the within-boundary focus

framework. In addition to these differences, the effect of shared values and internal mechanisms on entrepreneurial activity is more prominent for the within-boundary focus framework. Lastly, performance outcomes also differ in the two framework Qualitative performance outcomes have more importance in the within-boundary focus framework while they do not have so much importance for the beyond-boundary focus framework.

The conceptual frameworks are developed through continuously referring to each case. The iteration between theory and data is especially important for establishing internal validity, developing valid constructs, and increasing the generalizability of the emerging framework (Ozcan & Eisenhardt, 2009). According to Eisenhardt (1989), when theoretical saturation is achieved, the iteration between theory and data is stopped. In this study, a similar path is followed and the analysis is ended when the researcher fully believed that saturation is reached after several iterations between data and theory.

Case Portrayals

In this part of results section each case is presented in term of the emerging theoretical framework. The case portrayals discuss the emerging concepts and the relationships between them.

The ATRIA Company

Entrepreneurial activity in ATRIA is more concentrated on business-level within-boundary focus activities. It engages in new service development (e.g., introduction of “Z account”), extends to new markets (e.g., opening up branches in Netherlands) and engages in new businesses (e.g., engage in agricultural banking). This is mostly in line with the strategic focus of the company. As one of division heads suggest, “ATRIA doesn’t want to be everywhere all the time, what we want is sustainable growth”. The goal of sustainable growth does not preclude entrepreneurial activities. Entrepreneurship in ATRIA is given high priority and it is oriented towards differentiation which is valued by the top management who avoids risk taking but values speed in such areas as idea generation or implementation.

ATRIA does not have a strong organizational culture. The parent company’s conservative culture has diffused into its value system but the General Manager, who is perceived as the “sole leader of ATRIA” as one of the branch managers suggests, aims to change this conservative perspective. As a result of this leadership effect, ATRIA is currently experiencing a cultural change process. This change effort takes place in a context of a very ambitious and competition-oriented company. There is even within company competitiveness between the branches of the bank. As it is admitted by one of the division heads: “We set objectives for our company, and based on these we set objectives for every branch. We then watch the branches have a fierce competition with each other which in turn leads to an increased competitive power for the whole company”. Because the organizational

culture of ATRIA is currently being shaped, there is no strong influence of shared values on entrepreneurial activities in the company. In ATRIA, the drive for entrepreneurship comes from the leadership of the General Manager.

“If there is any entrepreneurial activity in ATRIA, this is mostly due to the presence of the leader. If the leader leaves the company, ATRIA would become a conservative bank concentrating only on its current operations”, says one of branch managers. The leader in ATRIA is highly supportive and gives priority to empowering all organizational members, as can be seen in his motto : “the only capital a bank owns is its human capital”. He behaves in a democratic way and is very approachable. Employees know and feel that he is always there in the company and will be welcoming all employee comments. The leadership style of the General Manager has a very strong influence on the entrepreneurial activities in ATRIA.

The presence of internal mechanisms in ATRIA influences the emergence of entrepreneurial activities to a large extent. The internal communication channels are well established and members can easily exchange their ideas. As one of the branch managers suggests, “I am not exaggerating, the door of the manager in every single branch of ATRIA is always open, and we encourage employees to communicate with us easily”. Moreover, there is the idea generation system, which is reviewed every three months where the best idea is selected, implemented, and rewarded. While there is high level of top management support for entrepreneurship, there is low tolerance for failure. The low tolerance for failure is mainly influenced by the risk-averse perspective of the parent company and it has

an influence on internal mechanisms in restricting entrepreneurial activity in the organization. In other words, because members know that risk-taking is not valued in the company they avoid it and this inhibits their entrepreneurial capacity.

As mentioned above, entrepreneurial activity is adopted in ATRIA as a differentiation tool. Moreover, because the bank does not use advertising heavily, the positive effects of new product introduction activities on customer awareness are essential outcomes of entrepreneurship for ATRIA. In other words, although financial returns are achieved after entrepreneurial initiatives, customer equity and brand awareness tend to be the more visible gains of the entrepreneurial process.

In general, it can be concluded that the most important antecedent of entrepreneurial activity (within-boundary focus) in ATRIA is leadership. The leader also has a direct influence on the organizational culture, strategic orientation, and internal mechanisms of the company. Regarding consequences, entrepreneurial activity in ATRIA generates more qualitative returns as compared to financial returns.

The DIPHDA Company

All types of entrepreneurial activity are observed in DIPHDA. Therefore, the dimensions observed in each of two frameworks are present in the company. DIPHDA continuously engages in new product development (e.g., producing a waffle-like chocolate cookie in triangular shape), establishes new distribution channels (e.g., opens up its own warehouses), engages in market expansion (e.g.,

exporting to international markets), starts new business (e.g., enters instant coffee market), diversifies into new industries (e.g., enters baby wipes market), and make corporate acquisitions (e.g., buys an information technologies company). The strategic orientation of the company is affected by its nationalist perspective and therefore the company has a vision to be a global Turkish brand. With this vision, the company both pursues diversification and business-level growth strategies such as niche market opportunities.

It is the leader's vision rather than the organizational culture that drives DIPHDA. Yet there is an attempt to create a shared organizational culture. The company culture is very dynamic in the sense that it is defined in terms of agility and flexibility. "We change very frequently, sometimes chaos management is required to understand this high speed of change we experience" said one of the informants. However, there are some values that are shared by organizational members. The basic drive that is accepted by all the members is the "ambition to do the best and to succeed". There is a high level of trust for the company and they believe that DIPHDA can achieve everything. In addition, entrepreneurial spirit is diffused to every department of the whole company. These shared values have a very positive influence on the emergence of entrepreneurial activities in DIPHDA.

The high frequency of entrepreneurial activity observed in DIPHDA is strongly linked to the leader who is the Head of the Board of Directors of the company. The dominant leadership role is entrepreneurial in terms of being proactive and very hardworking. As the marketing manager suggested "the most hardworking member of DIPHDA is our leader, we know that he is present in the

company all the time”. He knows every detail of his job even “the chocolate ingredient in grams among 3300 different products of our company”, as the General Manager said.

He has a visionary and top-down management style, however he also listens the comments of others in a consultative style. Sometimes he behaves in a strictly top-down fashion in the sense that he decides and the company takes action accordingly, but sometimes he delegates the whole responsibility to the organizational members. The situation determines his choice of appropriate style. In corporate acquisitions he tends to follow a top-down style whereas in market expansion he chooses to be empowering. He says “try it, go on!” to every business idea as long as it sounds right. He wants to try everything, tolerating the associated risk and costs. He knows that if it does not try, the company may be losing a business opportunity. Moreover, he is known to be highly successful at incorporating intuition in his decisions, but he also values the importance of market feasibility tests.

His way of thinking has diffused to organizational members. It is widely accepted that they frequently find themselves asking “how would he act or think in this situation” to themselves when making decisions. In other words, employees try to be like the leader as a result of the high level of admiration to the leader’s style in the company.

All the internal mechanisms are present in DIPHDA and they work very well to support especially within-boundary focused entrepreneurial activities. “We return with a luggage of possible products which can be produced by DIPHDA from

every business or holiday travel. We give these products to relevant departments for further evaluation” said one of the informants. The idea generation system works very well. Ideas can come from anywhere in DIPHDA. It comes from the customer, through customer complaints website which is reviewed and given feedback every three days. It comes from the employees, through idea generation system of the company, and it comes from a system which informs company members whenever a relevant product (e.g., a different ice cream) is introduced to the market anywhere around the world. There is also high level of top management support and tolerance for failure.

In general, entrepreneurial activities are mainly driven by the leadership in DIPHDA. However, regarding business-level and within-boundary focus activities, shared values and internal mechanisms are also very influential. Moreover, the entrepreneurial activities in DIPHDA both lead to positive financial and qualitative performance results. The company is quite successful in achieving loyalty from customers which is what DIPHDA values in terms of its qualitative performance results.

The ELECTRA Company

The entrepreneurial activities in ELECTRA are business-level and within-boundary focused activities. The company engages in new product development (e.g., introduction of new coaches the back seat of which becomes a bed for driver for resting periods), new distribution channel (e.g., direct sales to European market

through sales offices), market expansion (e.g., sales grow in international markets), and new business entry (e.g., introduction to in-city coach market) on a frequent basis. ELECTRA wants to be a global brand but mainly in its current industry. In other words, growth strategies through diversification are not preferred in ELECTRA. The business-level strategies are market expansion and product line extension which are in line with the dominant type of entrepreneurial activities observed in ELECTRA.

Due to the existence of a strong parent company culture, organizational culture is well established in ELECTRA. However, it should be noted that in some issues ELECTRA's culture diverges from the parent company culture. While the parent company culture is hierarchical and risk-averse, ELECTRA has a more lean structure where risks are taken and empowerment is very high. The company culture can be described as being very passionate in the sense that employees own the business and work with passion. So, entrepreneurial activities in ELECTRA are highly influenced by the presence of shared values/organizational culture. Ambition and courage appear to be the differentiating characteristics of the company's culture. The company is very ambitious to succeed and has a very strong self-belief. As the research and development manager suggested "We always say to ourselves why can't ELECTRA do this? We can, we have to". Accordingly, with this passion and continuous dedication to succeed, there is a strong presence of entrepreneurial spirit in the company.

The leader of ELECTRA is the CEO who was the General Manager of the company for approximately ten years. While the current organizational culture is

seen to influence entrepreneurial activities in ELECTRA, it is admitted by the members that the leader has created this culture. In other words, in the first years of his management, ELECTRA's culture was totally different from what it is now and entrepreneurial activity was influenced by the leader. As one of the informants suggests "Without him, ELECTRA would never have such an internal environment. If there is entrepreneurship here, then it is totally because of his presence and his ability to create such an organizational culture that stimulates entrepreneurship". It can be said that entrepreneurial activity in ELECTRA is both influenced by the leader and the organizational culture.

The leader is passionate about the company. He owns the business, he is empowering, proactive, and very fast in decision making. He is very supportive and wants his organizational members to continuously improve themselves. He brings books he liked to the employees to read and learn. "We as the whole production department watched a movie because he wanted us to watch and have the vision of doing the impossible", says one of the informants. Even as a CEO, he is still always present in the company and knows most of the details of his employees. In that sense, he is highly motivating towards his employees by having lunch with them and talking and learning about their personal life. He is also very hardworking. As one of the marketing managers suggested "I sometimes think that he also works in his sleep and thinks about ELECTRA in his dreams. I really admire him".

The internal mechanisms in ELECTRA also function very well. The informants frequently emphasized the existence of strong communication ties. The idea generation system works very well. Every month an idea is selected and the leader

presents an award to the idea owner. One of informants emphasized that “Our leader is very successful in using this ceremony as a strong motivation tool”. In this way, employees are motivated in ELECTRA to generate new ideas. Moreover, the tolerance for failure and acceptance of risk is very high in the company.

Entrepreneurial activities in ELECTRA have a very positive effect on the financial performance of the company. However, during the global economic crisis in 2009, ELECTRA was severely affected. The high rate of market expansion is considered as a factor causing this situation. In other words, entrepreneurial activity initially affected financial performance very positively but maybe due to fast decision making about multiple market expansions, its performance was shaken. ELECTRA has recently become considerably conservative in its entrepreneurial activities. On the other hand, qualitative performance is not emphasized as an important concern for the company.

In general, entrepreneurial activity in ELECTRA is at the business level and is influenced by leadership, shared values/organizational culture, internal mechanisms, and strategic orientation of the company.

The SYRMA Company

The entrepreneurial activities observed in SYRMA are corporate-level and beyond-boundary focus activities. As one of the directors of strategic management department suggested “Entrepreneurship in SYRMA occurs through corporate acquisitions”. After privatization, in the last three years SYRMA has given high

priority to establishing partnerships with companies in diverse industries such as health, education, and finance with the aim to develop new businesses. It expands mostly by acquiring new start-up companies in different industries (e.g., acquired a web-based education company). SYRMA wants to be a global brand providing information technology solutions to customers. In line with this vision, its main business-level strategies are concentrated more on making corporate acquisitions.

SYRMA is a very large old company and is currently experiencing a cultural adaptation process. Until its privatization, it was a hierarchically structured (especially the operations departments) company where a bureaucratic structure was present. While this situation is still dominant in the company, the signals of change are also observed in significant ways. The newcomers who joined the company after privatization are more risk-taking, team-work oriented, and entrepreneurial in thinking. But still, as one of the strategic management department directors mentioned “the cultural change is very slow here, things are still done in the old ways”. It can be said that entrepreneurial activity in SYRMA is not affected by the organizational culture or shared values.

What drives entrepreneurial activity in SYRMA is the leader who is the General Manager of the company. He is a strategy- and results-oriented manager who is not involved in the details of the business. He has a top-down management style and is very fast in decision making. As one of the strategy development department directors suggested “in a meeting in China he may discover a start-up business opportunity, e-mail the related information to relevant departments, and when he is back the job is done, we may find ourselves developing the business plan

of the corporate acquisition". He has a very tough leadership style and basically values speed in the daily operations. The leader in SYRMA is directly influencing the emergence of corporate-level entrepreneurial activities.

The internal mechanisms in SYRMA are poor in stimulating entrepreneurial activity in the company. There are problems of internal communication mainly because of the presence of bureaucracy. There is no idea generation system and no rewards or reinforcement mechanisms. While the top management provides support to Strategy and Business Development Division, which was established after privatization, this support is not available throughout the company.

In general, entrepreneurial activity in SYRMA is mostly influenced by the leader. While the leader has an entrepreneurial orientation, it was concluded that he has not aimed to create an organizational culture favoring entrepreneurial activity. This may be the reason why business-level entrepreneurial activities are relatively low in comparison to corporate-level activities. Regarding the performance outcomes, corporate-level entrepreneurial activities increase the financial performance, while qualitative outcomes are not the major concern of the company.

Discussion

The aim of this qualitative research is to understand firm-level entrepreneurship and its organizational level correlates. The results suggest that there *are* different types of entrepreneurial activities in companies and the correlates of these

different types differ from each other. The analysis reveals that there are two types of entrepreneurial activity. The first framework involves corporate-level (e.g., corporate acquisitions) while the second involves business-level entrepreneurial activities (e.g., new product introduction).

In general, the findings suggest that entrepreneurial activity is predominantly influenced by leadership in an organization. The leader is usually the head of the board of directors, the chief executive officer, or the general manager. In both of the frameworks of entrepreneurial activities, the leader has a very dominant influence. If the leader is willing to create an organizational culture that supports entrepreneurship, then business-level entrepreneurial activities are also seen in the company. But if the organizational culture does not favor entrepreneurship, then entrepreneurial activity is mostly at the corporate-level and initiated by the leader.

The analysis and results suggest that the existence of an organizational culture or a shared value system depends on the leader. In other words, it is the leader who creates the organizational culture. It can be concluded that there exists no strong and clear understanding of organizational culture in organizations. Accordingly, the effect of organizational culture on the emergence of entrepreneurial activities depends on the ability of the leader to create such an organizational culture that supports entrepreneurial activity.

Internal mechanisms are accepted to facilitate the emergence of entrepreneurial activities. If the leader aims to stimulate entrepreneurial thinking in the organization, then these internal mechanisms are developed accordingly.

Also, the strategic orientation of the company determines the type of entrepreneurial activity existing in the organization. When the orientation is towards growth through business development, then the company is more likely to engage in corporate acquisition. In terms of performance outcomes, it is found that entrepreneurial activity has a positive influence on financial performance. However, the amount of this effect depends on the success and the scale of the entrepreneurial activity. In some cases, entrepreneurial activity increases qualitative performance such as customer loyalty but have no direct influence on financial performance.

CHAPTER V

QUANTITATIVE RESEARCH

This chapter first develops the conceptual model of the quantitative study and the hypotheses. Further, quantitative research design is detailed, followed by the analysis, it then concludes with discussion of the findings of the quantitative part of this research.

Conceptual Model and Hypotheses

In this section of the chapter conceptual model of the quantitative study and related hypotheses are developed based on the literature review presented in chapter II. The conceptual model relates organizational culture and leadership to firm-level entrepreneurship (Fig. 5). According to Covin and Slevin (1991), there is reciprocal causality between corporate entrepreneurship and organizational culture. However, the authors study the effect of culture on corporate entrepreneurship and underline that organizational culture provides the suitable context within which entrepreneurial acts occur. Leadership is also suggested to foster entrepreneurial orientation of companies (e.g., Guth & Ginsberg, 1990; Ling et al., 2008). In the current conceptual model, organizational culture (i.e.,

specifically hierarchy, market, clan, and adhocracy types) and different leadership types (i.e., specifically control, compete, collaborate, and create types of leadership types) affect entrepreneurial posture of the companies. Entrepreneurial posture, which incorporates attitudes towards entrepreneurship, then leads to entrepreneurial activities of four different types - innovation/venturing, organizational renewal, strategic renewal, and domain redefinition. The model hypothesizes that the relationships between entrepreneurial posture and different types of entrepreneurial activities are moderated by various organizational factors such as management support, work discretion, rewards/reinforcement, time availability, and organizational boundaries. Further, four different types of entrepreneurial activities are hypothesized to influence company performance - both financial and qualitative. The conceptual model is controlled for company size, age, and industry. Current conceptual model attempts to contribute to the literature by (1) analyzing the influence of organizational culture and top management leadership on firm-level entrepreneurship, (2) differentiating between entrepreneurial posture and activities, (3) investigating the possible organizational factors as moderators, and (4) analyzing the effects of different entrepreneurial activities on company performance.

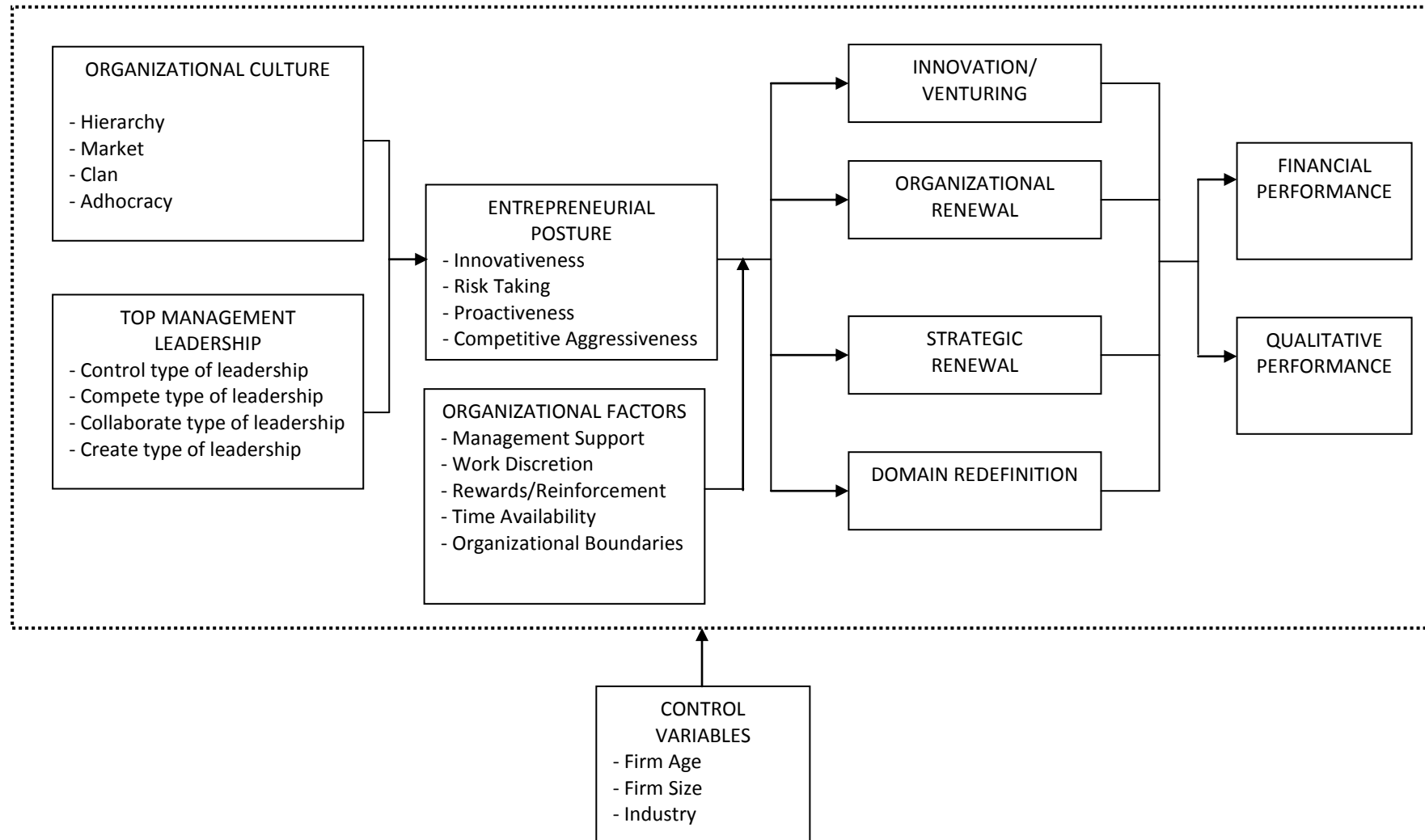


Fig. 5: The conceptual model

Competing Values Framework

There are different organizational culture models that aim to generate sets of cultural values (e.g., Organizational Culture Inventory, (Cooke & Rousseau, (1988)). Among these, Competing Values Framework (CVF) is adopted in this study. This framework as developed by Quinn and Rohrbaugh (1983) is used to analyze organizational effectiveness through empirically testing the criteria that researchers use to evaluate organizational performance. Authors stated that organizational scholars share an implicit theoretical framework when evaluating organizational effectiveness.

The original thirty nine indicators of organizational effectiveness produced spatial models based on two major dimensions (Quinn & Rohrbaugh, 1983). The first dimension differentiates between flexibility and stability. Flexibility emphasizes discretion, while stability involves order and control. The second dimension differentiates between internal focus, which emphasizes integration and unity; and external focus, which emphasizes differentiation and rivalry. Based on these dimensions, four different organizational culture types that differ on key organizational factors emerge: internal process model, rational model, human relations, and open-system model. The quadrants of CVF may also be presented as a circular structure considering that each quadrant is distinct from each other but at the same time share a spatial relationship with the other sharing the same dimension (Lawrence, Lenk & Quinn, 2009).

According to Denison and Spreitzer (1991), four cultures of CVF are ideal

types in that an organization can be characterized by more than one culture. Therefore, while these quadrants are mutually exclusive, the instrument enables researchers to generate profiles of cultures incorporating characteristics from each culture type at varying degrees (Cameron & Quinn, 1999). Lawrence et al. (2009) also stated that competing values are all critical and can co-exist in organizations. Organizations while highly associated with a certain culture type may exhibit certain characteristics of different culture types. As Prajogo and McDermott (2005) suggested, “There is nothing relating to having a strong internal orientation that necessarily prohibits the organization from also having elements associated with external orientation” (p. 1105).

Gregory, Harris, Armenakis, and Shook (2009), studying organizational culture and effectiveness, adopted CVF culture domains and found high reliabilities for the four different culture types. Howard (1998) provided an empirical support for the validity of CVF through multidimensional scaling method. The author concluded that CVF addresses three important issues in organizational culture research. First, the model provides descriptive analysis of organizational culture; next, it develops dimensions that enable comparison of different organizational cultures and lastly, it provided tools for the assessment and improvement of organizational culture (Howard, 1998).

The Effects of Organizational Culture on Entrepreneurial Posture

The four quadrant structure of CVF is presented in Fig. 6, which is based on two

basic dimensions of stability vs. flexibility and internal vs. external focus, form four different culture types (Quinn & Rohrbaugh, 1983). Clan type of cultures is flexible and has an internal focus; adhocracy culture is also flexible but has an external focus. The market culture accentuates stability and control with an external, focus while hierarchy emphasizes stability with an internal focus.

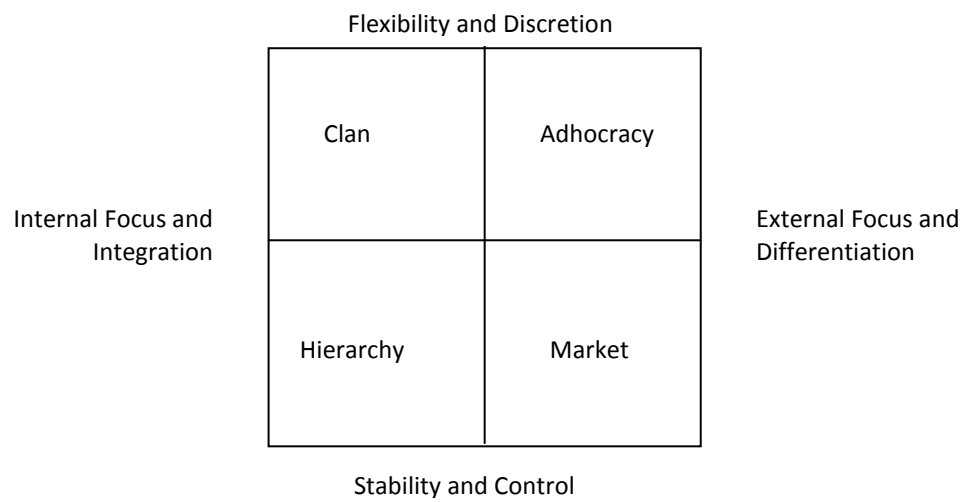


Fig. 6 The Competing Values Framework

Note: The model is adopted from Cameron and Quinn (1999)

In the hierarchy type of organizational culture, the main emphasis is on efficiency, stability, and control. Multiple hierarchical levels, procedures, concern for efficiency, stability, and predictability are major features (Cameron & Quinn, 1999). The dominant leadership style is coordinator or administrator and bonding mechanisms are rules, policies, and procedures (Desphandé, Farley & Webster, 1993). Burns and Stalker (1961) emphasized that mechanistic structures impede innovative capacity of organizations, while organic structures enhance it. The hierarchy type of organizational cultures shares similar characteristics with the conservative firms discussed in Miller and Friesen (1982) that emphasize

centralization and control. Accordingly, current model predicts a negative correlation between entrepreneurial posture and hierarchy cultures.

H1: There is a negative relationship between hierarchy type of organizational culture and entrepreneurial posture.

In market cultures, stability and control are again the main focus but the orientation is external. While rules and procedures provide the basis of control in hierarchy cultures, market mechanisms are essential in market cultures. The transactions in the form of sales and exchanges provide the major source of competitiveness (Cameron & Quinn, 1999). The core values are productivity and competitiveness (Cameron & Freeman, 1991). Since goal achievement is very important in this culture, the dominant leadership style is achievement-oriented (Desphandé et al., 1993). Competition and differentiation are essential to generate entrepreneurial initiatives. Competitive aggressiveness, referring to company's reception towards achieving competitive advantage, is an essential component of entrepreneurial orientation (Lumpkin & Dess, 1996). While stability and control may hamper entrepreneurial posture, external orientation that emphasizes competition and differentiation would foster it. Accordingly, the following hypothesis is developed:

H2: There is a positive relationship between market type of organizational culture and entrepreneurial posture.

The clan type of organizational culture is similar to family-type organizations where the major emphasis is on commitment, loyalty, and cohesion (Cameron & Freeman,

1991). These organizations provide a friendly place for their employees to enhance their commitment and loyalty to the organization. Employees are free to share their ideas with others and there is an emphasis on morale, teamwork, and participation (Cameron & Quinn, 1999). Leaders act as facilitators or mentors and develop a sense of family within the organization (Desphandé et al., 1993). The nurturing atmosphere in the organization would enable employees to generate new ideas or solutions to existing problems. In other words, empowerment of employees and emphasis on teamwork will provide the opportunity for entrepreneurial initiatives. In line with this reasoning, the following hypothesis is developed:

H3: There is a positive relationship between clan type of organizational culture and entrepreneurial posture.

Lastly, in adhocracy type of organizational culture, the main emphasis is on adaptability, flexibility, and creativity (Desphandé et al., 1993). This type of culture is mostly observed in aerospace, software development, and filmmaking industries where the focus is on individuality, risk taking, flexibility, and innovation (Cameron & Freeman, 1991). The leader in this organization culture acts as the innovator, entrepreneur, or the risk-taker (Desphandé et al., 1993). Apparently, entrepreneurial posture is closely related with adhocracy type of organizational cultures.

H4: There is a positive relationship between adhocracy type of organizational culture and entrepreneurial posture.

Flexibility and external orientation are both important factors affecting entrepreneurial posture of the companies. Flexibility within the company enhances the adaptability to changing conditions and fosters discretion, which are both essential for entrepreneurial initiatives. External orientation emphasizes differentiation and competition focus that are influential in entrepreneurial activities. Considering that adhocracy type of cultures incorporates both of these dimensions, the influence of adhocracy culture on entrepreneurial posture will be more when compared to the effects of culture types. The flexibility dimension is considerably more important in determining a company's entrepreneurial capacity. The discretion and dynamism implied by this dimension enables companies to create alternative solutions to challenges confronting the company and generate innovative ideas for better competitive positioning (Cameron & Quinn, 1999). Accordingly, although the internal orientation of the clan type of organizational culture helps to ensure integration and unity, the flexibility focus which provides an empowering atmosphere within the company fosters entrepreneurship. On the other hand, in the market culture, although the external orientation emphasizes differentiation and rivalry (Cameron & Quinn, 1999), the emphasis on stability and order impede entrepreneurship. Thus, the following hypotheses are developed.

H5: The adhocracy type of organizational culture will be more influential on entrepreneurial posture than the clan and market types of organizational culture.

H6: The clan type of organizational culture will be more influential on entrepreneurial posture than the market type of organizational culture.

The Effects of Leadership Types on Entrepreneurial Posture

Quinn (1984), reviewing the leadership literature, developed eight different leadership types and these types were then presented in CVF (Quinn & Rohrbaugh, 1983). CVF provides a thorough representation of the complex nature of organizational settings, where managers need to respond appropriately to the diverse demands of conflicting situations (Belasen & Frank, 2008). The framework suggests that effective managers successfully balance diverse roles present in CVF to ensure organizational effectiveness (Lawrence et al., 2009; Young & Shao, 1996). As can be seen in Fig. 7, Quinn's 1984) initial model of leadership has eight basic leadership types and presents two different specific leadership types for each one of the four quadrants (internal process model, rational model, human relations and open-system model). The lower left quadrant, which is the internal process model, involves the monitor role (emphasis on information, continuity and stability) and the coordinator role (emphasis on scheduling, coordinating, controlling). The rational model involves the director role (emphasis on goal setting, clarification of goals) and the producer role (emphasis on task-orientation). The upper left quadrant of human relation involves the facilitator role (emphasis on negotiation and consensus) and the mentor role (emphasis on fairness, empowerment, and legitimacy). In the last quadrant of open-system model, the two leadership types are the innovator role (emphasis on creativity and change) and the broker role (emphasis on development and network relations). The basic rationale behind the CVF leadership types is to develop a set of roles that portray contradictory

leadership types in relation to the demands of external adaptation and internal integration and also stability vs. flexibility strategies.

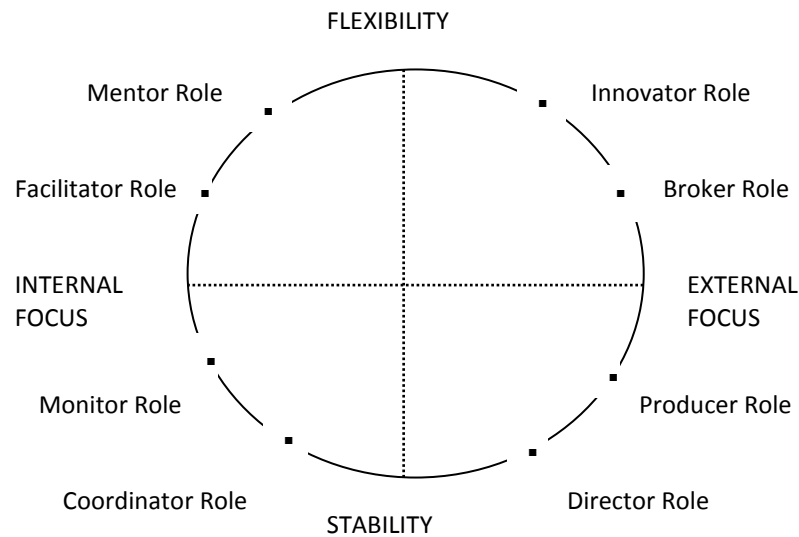


Fig. 7 The Competing Values Leadership
 Note: The model is adopted from Quinn (1984).

In a study conducted among 173 executives, Denison, Hooijberg, and Quinn (1995) found support for the four-quadrant structure for the diverse leadership types while little empirical support has been found for the circumplex model. Moreover, more recent studies also supported the four-quadrant structure (Hart & Quinn, 1993; Young & Dulewicz, 2005).

In a further study, Cameron, Quinn, DeGraff, and Thakor (2006) changed the labels of the four quadrants for simplicity, where internal process model is labeled as *control*, rational goal model is labeled as *compete*, open systems model is labeled as *create*, and human resource model is labeled as *collaborate*. Lawrence et al. (2009) changed the factor structure of the four-quadrant model of CVF leadership types as well. Current study adopts the four-quadrant structure of CVF leadership

types as they are developed in Lawrence et al. (2009). The authors' aim was to develop a valid multi-dimensional measurement instrument based on CVF. Control, which originally included monitor and coordinator roles, additionally included the regular role. Compete, which originally included producer and director roles, is redefined with the addition of competitor and driver roles. Collaborate, which originally included facilitator and mentor roles, included the empathizer role in the new model. Lastly, create that originally included innovator and broker roles, is redefined by dropping broker role and adding innovator, visionary, and motivator roles. The study found a strong support for the four-quadrant structure of CVF leadership types, where neighboring quadrants have moderate to high significant correlation and opposing quadrants have a lesser degree of significant correlation when compared to neighboring ones.

Control type of leadership - involving monitor, coordinator, and regulator roles – emphasizes accurate work, complete control of projects, clarification of rules and procedures (Quinn, 1984). Because the primary goal of this quadrant is stability and internal focus, standardized rules, high levels of documentation, and close monitoring of projects are highly valued (Lawrence et al., 2009). A leader who applies high levels of control and regulation impedes the development of entrepreneurial activities in the organization since corporate entrepreneurship involves innovation, creativity and flexibility. Leadership, which is based on control and monitoring, will create an environment where stability and maintenance rather than change and adaptation are valued. Accordingly, current model predicts a negative relationship between the control type of leadership and entrepreneurial

posture:

H7: There is a negative relationship between control type of leadership and entrepreneurial posture.

Compete type of leadership - involving producer, competitor, and driver roles - emphasizes productivity, accomplishment, and goal clarity (Quinn, 1984). Because stability and external orientation are highly valued here, compete type of leadership are based on competition focus, increased importance given to speed to the market and strong work ethic (Lawrence et al., 2009). These leaders manage competitiveness, energize employees, and have customer focus (Cameron & Quinn, 1999). Corporate entrepreneurship involves recognition of opportunities in new markets and creation of new businesses to meet diverse customer needs (Guth & Gibsberg, 1990). Accordingly, leaders who emphasize competitiveness and customer orientation will foster entrepreneurship in the organization. Accordingly, the current model hypothesizes a positive relationship between compete type of leadership and entrepreneurial posture:

H8: There is a positive relationship between compete type of leadership and entrepreneurial posture.

Collaborate type of leadership - involving facilitator, empathizer, and mentor roles - emphasizes participation, openness, morale, and commitment (Denison et al., 1995). Leaders encourage participation of their employees, based on the belief that satisfied employees have better job performance (Young & Shao, 1996). Moreover,

leaders show high concern for subordinates and provide mentoring and career development opportunities to enhance commitment and loyalty (Lawrence et al., 2009). Collaborate type of leadership involves flexibility orientation with an internal focus. Therefore, management of teams, interpersonal relationships, and development of others are given great emphasis (Cameron & Quinn, 1999). Integration and communication are found to have a positive influence on corporate entrepreneurship (Zahra, 1991). Empowerment of employees and proper management of teams emphasized by this type of leader are hypothesized to have a positive association with the entrepreneurial atmosphere in the organization. Accordingly, the model predicts a positive relationship between the collaborate type of leadership and entrepreneurial posture:

H9: There is a positive relationship between collaborate type of leadership and entrepreneurial posture.

Create type of leadership - involving innovator, visionary, and motivator roles - fosters innovation, growth, and adaptation (Denison et al., 1995). Leaders in this category anticipate customer needs, inspire and motivate people in the organization to perform more than expected, and continuously stimulate innovation and change. Thus, create type of leadership have a direct connection with entrepreneurship. Accordingly, the following hypothesis is suggested:

H10: There is a positive relationship between create type of leadership and entrepreneurial posture.

Create type of leadership types involves management of innovation, future and continuous improvement (Cameron & Quinn, 1999). Flexibility focus accompanied with an external orientation implies a great concern for growth, change and adaptation by the leader (Young & Shao, 1996). Considering that entrepreneurial posture involves innovation, proactiveness, and risk taking, create type of leadership is expected to have more influence on entrepreneurial posture when compared to collaborate and compete types of leadership. Accordingly the hypothesis is developed as follows:

H11: Create type of leadership will be more influential on entrepreneurial posture than collaborate and compete types of leadership.

Leaders, who act as facilitators encourage participation through fostering open communication, and support contribution of different views and ideas (Lawrence et al., 2009). This collaborative style of leaders enhances empowerment in the organization. Organizational participants' generative ability will be invigorated through the nurturing atmosphere in the organization, leading to increased levels of idea generation and creative thinking. While create type of leadership is suggested to have a positive association with the entrepreneurial posture, the flexibility, team-orientation, and communication emphasis of collaborative leaders is expected to have an even stronger influence.

H12: Collaborate type of leadership will be more influential on entrepreneurial posture than compete type of leadership.

The Effects of Entrepreneurial Posture on Entrepreneurial Activities

A review of the state of the field (Zahra et al., 1999) of firm-level entrepreneurship reveals that most studies adopt the scale developed by Miller and Friesen (1982) to measure different constructs due to having no consensus on the term.

Consequently, a serious misfit between the construct and measures has occurred, questioning the meaning of research findings and their theoretical and practical implications (Zahra et al., 1999; p. 54)

Zahra et al. (1999) stated that future research should differentiate between entrepreneurial disposition (Covin & Slevin, 1991; Miller & Friesen, 1982), orientation (Lumpkin & Dess, 1996), and actions (Zahra, 1991) to explore the different conceptualizations. According to Covin and Slevin (1991), entrepreneurial orientation is an overall “strategic philosophy” guiding the behavioral dimensions of the company: “It is a ‘higher-order’ construct whose dimensions are associated with a diverse array of more specific tactical manifestations.” (Covin & Slevin, 1991; p. 13)

While the construct is stated as a general philosophy of the company, the conceptualization involves both actual behaviors and attitudes, which confuses the construct it intends to measure (Wiklund, 2006). Considering that this conceptualization and corresponding scale is one of the popular scales measuring firm-level entrepreneurship, this misconception impedes theory development in the field and continuously requires refinement of the construct.

According to Lumpkin and Dess (1996), entrepreneurial orientation, which

incorporates autonomy, innovation, risk taking, proactiveness, and competitive aggressiveness, represents the process aspect of entrepreneurship. Consequently, this orientation facilitates the company's engagement in an entrepreneurial action. The same authors suggest that entrepreneurship is represented by new entry and it explains *what* entrepreneurship consists of, while entrepreneurial orientation refers to processes and explains *how* entrepreneurship (or new entry) has occurred (Lumpkin & Dess, 2001).

Taking into consideration that strategic orientation or posture is effective only when it is well implemented (Covin & Slevin, 1991), the manifestation of such posture in innovative and entrepreneurial action is what really makes a company entrepreneurial. Accordingly, actions rather than orientations make the companies entrepreneurial. Corporate entrepreneurship is more than innovation. It incorporates rejuvenation and redefinition that result in competitive advantage (Covin & Miles, 1999). Consequently, entrepreneurial actions that result in better organizational positioning make companies more entrepreneurial than internal orientations that guide those behaviors.

Considering these, the current study differentiates between "entrepreneurial posture" and different "types" of entrepreneurial activities. "Entrepreneurial posture" construct incorporates *only* attitudes towards entrepreneurship and represents entrepreneurial orientation of the companies. The construct incorporates dimensions of innovativeness, risk taking, proactiveness, and competitive aggressiveness. Innovativeness is inarguably the fundamental dimension and involves the propensity of the company engage in innovation (Garcia

& Calantone, 2002). High risk projects and perception of risk as a natural component of new initiatives are also associated with entrepreneurial posture (Covin & Slevin, 1989; Miller & Friesen, 1982). Lumpkin and Dess (2001), studied proactiveness and competitive aggressiveness as separate dimensions of corporate entrepreneurship. Proactiveness suggests a forward-looking characteristic of a company to anticipate demand and be a market leader, while competitive aggressiveness emphasizes outperforming competitors (Lumpkin & Dess, 2001).

Entrepreneurship literature suggests that there are different types of entrepreneurial activities in organizations. In other words, corporate entrepreneurship may take several forms (Sharma & Chrisman, 1999). According to Vesper (1984), corporate entrepreneurship may be in the form of new strategic direction, initiative from below, and autonomous business creation. Schollhammer (1982) identified five different forms of entrepreneurship as well: administrative (making resources available, increasing research and development projects), opportunistic (encouragement of idea champions for opportunities), imitative (imitation of others initiatives), acquisitive (acquisitions, mergers, strategic alliances), and incubative (creation of new venture units).

Stopford and Baden-Fuller (1994) differentiated between three types of firm-level entrepreneurship. First one is new business venturing by which individuals and groups within organizations persuade others to change their behavior and influence the creation of new resources. Second one is organizational renewal in which resource pattern of organization is changed for superior performance. The third one involves Schumpeterian innovation that transforms not

only the enterprise but also the whole competitive environment.

Thornberry (2001), on the other hand, differentiated between four different forms of corporate entrepreneurship: corporate venturing, intrapreneuring, organizational transformation, and industry rule breaking. Corporate venturing involves creation and development of new business units and product innovation, like taking laser technology used in military, medical, and industrial markets to the beauty/cosmetic market (Thornberry, 2001). Intrapreneuring involves instilling entrepreneurial mindset into the employees of the companies, like attempts to create corporate entrepreneurs out of line managers. Organizational transformation involves de-layering, cost cutting, re-engineering, downsizing only when they result in new business opportunities. Lastly, industry rule breaking involves changing the rules of competition in the industry and forcing other manufacturers to follow them.

Covin and Miles (1999) developed four different forms of corporate entrepreneurship: sustained regeneration, organizational rejuvenation, strategic renewal, and domain redefinition. Sustained regeneration is the most widely recognized form of entrepreneurship at the corporate level, where companies regularly introduce new products and services or enter new markets. With this form of entrepreneurship, organizations exploit untapped market opportunities either with new products or with current products in new markets. The second form is organizational rejuvenation, through which organizations improve their competitive position through modifying their internal processes, structures, and/or capabilities. Organizational rejuvenation is directly related to changes in the

organization itself.

Entrepreneurial activities do not only relate to the strategy of the organization but also to the organization's internal systems and procedures. In strategic renewal, "the organization seeks to redefine its relationship with its markets or industry competitors by fundamentally changing how it competes" (Covin & Miles, 1999; p. 52). This form actually moves one-step further away from the organization to its surrounding dynamic environmental context. The last form is the one by which the organization redefines its domain and proactively creates a new competitive ground that others have not so far recognized.

As a result of the review of literature on different types of corporate entrepreneurship, this study differentiates among four different types of entrepreneurial activities. The first one is labeled as *innovation/venturing*. As Stopford and Baden-Fuller (1994) stated, this category of activities involves new product development, entering into new markets, and finding new niche market opportunities. This type is also called sustained regeneration in the schema developed by Covin and Miles (1999). Innovation is different from innovativeness in that while innovativeness (which is the central dimension of entrepreneurial posture of companies) represents the company's propensity to engage in innovation; innovation involves development of an invention together with the market introduction (Garcia & Calantone, 2002). In other words, innovativeness represents inclination towards innovative activity.

The second form of corporate entrepreneurship is *organizational renewal*, reflecting change in the resource pattern deployment of organizations (Stopford &

Baden-Fuller, 1994) and changes in the internal processes of the companies (Covin & Miles, 1999). The last two forms of corporate entrepreneurship activities, *strategic renewal* and *domain redefinition*, are adopted from Covin and Miles (1999). Strategic renewal incorporates innovations in the strategies of companies, while domain redefinition involves exploitation of market opportunities or engagement in new competitive battles. In line with the reasoning above, companies with entrepreneurial posture are expected to act in accordance with their orientation and engage in entrepreneurial activities. Overall, a positive relationship between entrepreneurial posture and different types of entrepreneurial activities in the companies is hypothesized.

H13: There is a positive relationship between entrepreneurial posture and (a) innovation/venturing, (b) organizational renewal, (c) strategic renewal, and (d) domain redefinition form of corporate entrepreneurship.

The Moderating Effects of Organizational Factors

According to Zahra et al. (2004), the examination of possible moderating variables affecting the relationship between organizational culture and entrepreneurship is essential. In order to turn entrepreneurial intentions or orientations into reality (i.e., actions), some organizational factors are required as facilitators. According to Krueger, Jr. and Brazeal (1994), there needs to be top management commitment to entrepreneurship for employees to demonstrate entrepreneurial initiatives. In their analysis of organizational settings that foster corporate entrepreneurship, Kuratko

et al. (1990) developed five factors that facilitate the emergence of entrepreneurial initiatives. Management support involves adoption of employee ideas, personal recognition, and support and funds for projects (Hornsby et al., 1993). Work discretion refers to the decision making opportunity and autonomy given to employees. Lumpkin and Dess (1996) study autonomy as a dimension of entrepreneurial orientation construct, but autonomy given to an employee is more a characteristic of the environment favoring entrepreneurship. Companies should allow employees to make decisions related to their work and tolerate mistakes during entrepreneurial initiatives (Hornsby et al., 1993). Rewards and reinforcement incorporate providing challenging work, empowerment, and appreciating innovative ideas (Kuratko et al., 1990). Time availability refers to time given to employees for problem solving and long-term discussions (Hornsby et al., 1993). Lastly, organizational boundaries refer to elimination of strict job descriptions, rigid standards of performance, and standard operating procedures (Kuratko et al., 1990).

There is empirical support for the effects of these factors as influencing factors of corporate entrepreneurship (Hornsby et al., 1993; Hornsby et al., 2002; Kuratko et al., 1990). The five factor structure of organizational variables that foster corporate entrepreneurship is often studied as antecedent variables affecting entrepreneurship directly (Hornsby et al., 1993; Kuratko, Ireland, Covin & Hornsby, 2005) or as mediating variables between entrepreneurial strategy and entrepreneurial behavior (Hornsby et al., 2002). The current model adopts them as moderating variables facilitating entrepreneurial orientations to be realized. In

other words, it is proposed that entrepreneurial posture of companies become entrepreneurial actions when there is support from management regarding innovative initiatives, when autonomy is given to employees to generate ideas and solve problems, when there is rewards/reinforcement and time for innovation, and when organizational boundaries do not impede innovative capacity of employees.

Accordingly, following hypotheses are developed:

H14: There is a positive relationship between entrepreneurial posture and innovation/venturing only when there is (a) management support, (b) work discretion, (c) rewards/reinforcement, (d) time availability, (e) defined organizational boundaries.

H15: There is a positive relationship between entrepreneurial posture and organizational renewal only when there is (a) management support, (b) work discretion, (c) rewards/reinforcement, (d) time availability, (e) defined organizational boundaries.

H16: There is a positive relationship between entrepreneurial posture and strategic renewal only when there is (a) management support, (b) work discretion, (c) rewards/reinforcement, (d) time availability, (e) defined organizational boundaries.

H17: There is a positive relationship between entrepreneurial posture and domain redefinition only when there is (a) management support, (b) work discretion, (c) rewards/reinforcement, (d) time availability, (e) defined

organizational boundaries.

Organizational Performance Outcomes

The literature supports the positive relationship between corporate entrepreneurship and organizational performance (Antoncic & Hisrich, 2001; Lumpkin & Dess, 1996; Wiklund, 1999; Zahra, 1991; Zahra, 1993a). Corporate entrepreneurship activities increase product diversity of the companies, create new market opportunities, and generate new ways of competing with other market players, and all these contribute to the well-being of the company through enhancing success. Accordingly, the current study expects a positive relationship between different types of corporate entrepreneurship activities and organizational performance.

There are diverse measures of performance in the entrepreneurship literature including efficiency, growth, profit, size, liquidity, success/failure, market share, and leverage (Murphy, Trailer & Hill 1996). Wiklund (1999) stated that performance measures should include both growth and financial performance and should be evaluated in comparison to the competitor. For instance, Zahra and Garvis (2000) adopted return on asset (ROA) as a profitability indicator and sales growth as a growth indicator.

On the other hand, Antoncic and Pradon (2008) measured organizational performance in both absolute and relative terms. Absolute terms reflect growth in sales and number of employees and profitability increase in return on assets (ROA),

return on sales (ROS), and return on equity (ROE) in the last 3 years. Relative terms involve growth of sales and subjective comparison of profitability with the competitor.

Considering the increased importance of intangible outcomes of corporate entrepreneurship (Dess et al., 2003), this study focuses on both financial performance and qualitative performance. This measurement model is based on İşeri Say, Toker, and Kantur (2008) which drives its roots from Denison (2001). İşeri Say et al. (2008) measures performance consisting of five categories including competitive positioning, performance capabilities, organizational integrity, customer equity, and financial results. In the current study, financial results and competitive positioning are combined under one category and named as financial performance and performance capabilities, whereas organizational integrity and customer equity are combined and named as qualitative performance. Financial performance includes sales growth, return on sales, return on assets, market share, ability to introduce new products/services before competitors, and flexible pricing strategies. Qualitative performance includes product/service design, product/service quality, flexibility in product/service introduction, employee satisfaction, employee commitment, qualified personnel, customer satisfaction, customer loyalty, and understanding the customer. Accordingly, the hypotheses are developed as follows:

H18: There is a positive relationship between innovation/venturing and (a) financial performance and (b) qualitative performance of the company.

H19: There is a positive relationship between organizational renewal and (a) financial performance and (b) qualitative performance of the company.

H20: There is a positive relationship between strategic renewal and (a) financial performance and (b) qualitative performance of the company.

H21: There is a positive relationship between domain redefinition and (a) financial performance and (b) qualitative performance of the company.

Control Variables

Murphy et al. (1996) studied performance measurement in entrepreneurship research and concluded that this research stream would benefit from including critical context variables such as industry, age, and size of the company. The review found that majority of studies included size as a control variable, 46% controlled for industry, and 29% controlled for age of the company. Antoncic and Pradon (2008) analyzing corporate technological entrepreneurship and organizational performance, also adopted age, size, and industry dynamism as control variables. Zahra and Garvis (2000) controlled for size, age, scope of international operations, past performance, and industry in analyzing the relationship between international corporate entrepreneurship and organizational performance. There are within industry differences among entrepreneurial activities (Covin & Slevin, 1991; Zahra, 1993a). Company size and age has a significant relationship with corporate innovation and venturing (Zahra, 1993a). Accordingly, age, company size, and

industry are included in the model as control variables.

This section developed the conceptual model and related hypotheses of the study. The next section will elaborate on the research design.

Quantitative Research Design

In this section of the chapter research objectives of the quantitative study are presented, followed by semi-structured and focus group study discussions. The section then details the method of the study in terms of sampling plan, data collection, and measures adopted in the questionnaire.

Research Objectives

The purpose of the quantitative part of this research is to clarify firm-level entrepreneurship and understand its relationships with organizational culture, leadership, and organizational performance. Current conceptualizations of firm-level entrepreneurship incorporate attitudes, dispositions, and behaviors which create confusion. Therefore, the aim of this study is to achieve construct clarification at firm-level analysis of entrepreneurship. Additionally, the study attempts develop a better understanding of organizational correlates of firm-level entrepreneurship. Specifically, the relationship between organizational culture, leadership, and organizational performance need to be examined in detail. Accordingly, basic research questions of the study are as follows:

1. What is the relationship between organizational culture and firm-level entrepreneurship?
2. What is the relationship between leadership and firm-level entrepreneurship?
3. How can we dimensionalize firm-level entrepreneurship?
4. Are there differentiated types of entrepreneurship activities in companies?
5. Is entrepreneurial posture different from entrepreneurial activities in companies?
6. Are there any organizational factors different from organizational culture and leadership that have a relationship with firm-level entrepreneurship?
7. What is the relationship between firm-level entrepreneurship and organizational performance?

Semi-Structured Interviews and Focus Group Studies

Before developing the questionnaire to test the conceptual model, semi-structured interviews and focus group studies are conducted to clarify the corporate entrepreneurship construct and relate it to organizational culture, leadership, and performance. In this part of the study, the researcher acted as the interviewer in semi-structured interviews and moderator in focus group studies.

In the four semi-structured interviews that are conducted, sample interview questions included:

1. What is your understanding of firm-level entrepreneurship?

2. What are the inhibitors/facilitators of firm-level entrepreneurship?
3. What role does your organizational environment/culture play in facilitating firm-level entrepreneurial process? (Adapted from Bhardwaj & Momaya, 2006).

All the discussions are both tape-recorded and written down by the interviewer as far as possible in order to ensure a full detailed understanding of the data. The discussions are transcribed and then content analyzed by the researcher. During content analysis, all the words and the phrases that are mentioned as related to firm-level entrepreneurship, its determinants, and consequences are all noted. First, analysis is carried out separately for each interview and focus group, and then results are analyzed in aggregate terms to generate major conclusions.

The first semi-structured interview is conducted with Prof. Dr. Sema Sakarya from International Trade Department , Bogazici University. It is held on 2 April 2009 and lasted for forty five minutes. The interview started with the question of “what do we understand from firm-level entrepreneurship?” and continued with interviewee’s ideas about firm-level entrepreneurship. In situations where too much time is devoted for a specific issue, interviewer asked a different question in order to shift the focal point of discussion. The most significant result gained from this interview is the importance of firm-level entrepreneurship as an action that creates a “forward leap” (term suggested by the interviewee) in an organization. The content analysis results are given in Table 15.

Table 15. Content Analysis Results of the First Semi-Structured Interview

<i>Items, words, phrases</i>	<i>Frequency</i>
Innovation is an essential component of CE ²	16
CE should result in an important leap	4
The end result/output/value is very important	4
CE should be growth and improvement oriented	4
The leader/CEO/founder is very important is CE	4
Institutionalization is crucial	2
Proactiveness	2
Risk taking	1
Entrepreneurial spirit among workers	1
Research and development	1
Management of innovation	1

The second semi-structured interview is conducted with Prof. Dr. Dilek Çetindamar from the Faculty of Management, Sabancı University. The interview is held in the office of the interviewee in Sabancı University on 30 April 2009 and lasted for one hour. The major emphasis is on the distinction between entrepreneurial attitudes and action and the importance of leader/founder characteristics, actions, and motivations on the emergence of firm-level entrepreneurship. The content analysis results are given in Table 16.

Table 16. Content Analysis Results of the Second Semi-Structure Interview

<i>Items, words, phrases</i>	<i>Frequency</i>
The leader/CEO/founder is very important in CE	11
The effect of CE on performance is very important	11
The organizational culture is a determining factor in CE	5
Entrepreneurial attitude is different from action	5
The influence of different industry/environment is important	3
Innovation	3
Motivation/desire for entrepreneurship is crucial	2
Organizational factors are crucial in promoting CE	2

The third semi-structured interview is held with Ertan Kirik who is the general manager of Nimet Gıda Sanayi ve Ticaret A.Ş. and who is also the head of Young

² CE will be used as an abbreviation of corporate entrepreneurship in the content analysis results tables.

Entrepreneurs Club (Genç Girişimciler Derneği). The interview is held in the head office of the club on 27 May 2009 and lasted for forty five minutes. Additional to leading young entrepreneurs, the club also aims to create intrapreneurs. The interviewee suggested that the members of the club are generally working in institutionalized companies and the main aim of the club is to enhance the members' entrepreneurial spirit to create an entrepreneurial atmosphere in the organizations they are working. The most significant outcome of this interview is the importance of newness, innovation, proactiveness, and the entrepreneurial spirit required for the emergence corporate entrepreneurship. The content analysis results are given in Table 17.

Table 17. Content Analysis Results of the Third Semi-Structure Interview

<i>Items, words, phrases</i>	<i>Frequency</i>
New product/service/market/process	11
Proactiveness	9
The leader is very important in CE	7
Spirit/motivation is crucial	4
Management of CE (structure, plans, processes)	4
Top management mentality/culture	4
Rewards and reinforcement are crucial determinants	3
Team-work	2
Sustainability	2
Technology	1
Growth orientation	1

The last interview is held with Julyet Yavuzaygen, who is the business development and corporate communications director of Ernst & Young Company Turkey. Ernst & Young arranges "The Entrepreneur of the Year" competition since 1986 in different countries around the world and the competition is organized in Turkey since 2004. Julyet Yavuzaygen is the country leader of "The Entrepreneur of the Year" competition since 2004. This competition basically selects the most successful

entrepreneur based on six criteria: turnaround project, innovations, strategy, financial performance, social impact, and integrity. The discussions concentrated on the abilities, motivation, and inspiration of the leader in entrepreneurship. The content analysis results are given in Table 18.

Table 18. Content Analysis Results of the Fourth Semi-Structure Interview

<i>Items, words, phrases</i>	<i>Frequency</i>
The leader/CEO/founder is very important is CE	4
Turnaround project	2
Management of CE (strategy)	2
Proactiveness	2
Innovation	1
Organizational culture	1
Social effect of CE	1
Integrity	1
Calculated risk	1
Luck	1

Four focus group studies are conducted which meets the minimum number requirement of three in a given study (Morgan, 1997). The groups are organized to ensure homogeneity within the group and the heterogeneity among groups. The focus group discussions started with the question of “What do you understand from corporate entrepreneurship?” Once the participants discussed the meaning of corporate entrepreneurship, attitudes towards corporate entrepreneurship, and firm-level entrepreneurial acts, the moderator interrupted the discussions to shift the talk towards concentrating on organizational environments that determine firm-level entrepreneurship. The moderator interrupted the discussions in instances when there is too much concentration on one issue, when one party dominated the discussions, and when the discussions diverged from the focal point. In all the discussions, the participants sat around a circular table so that they could

see each other directly and the moderator sat behind them. The discussions are carried out in Turkish although some concepts are mentioned in English form time to time and all discussions are tape recorded.

First group is consisted of doctoral students of Bogazici University, Department of Management from the fields of Finance, Management and Organizations, and Marketing on 7 April 2009 in the research assistants' office. The group members are all doctoral students of Management Department, two from finance, three from management and organizations, and two from marketing concentration which increased the richness and quality of discussions. The discussions lasted for fifty minutes and the content analysis results are given in Table 19.

Table 19. Content Analysis Results of the First Focus Group Study

<i>Items, words, phrases</i>	<i>Frequency</i>
New product/service/market/process	47
Risk taking	13
Support, rewards and reinforcement, feedback are crucial	8
The leader/CEO/founder is very important is CE	7
Organizational culture is very important	7
Proactiveness	6
Open-communication	4
Management of CE (structure)	4
Awareness	3
Strategic relationships with co-partners	3
The end result/output/value is very important	3
Team work	2
The influence of different industry/environment is important	2
Extra time for idea generation, opportunity recognition	2
Improvement	1

Second group members are top-level management executives in institutionalized companies who are members of a group of executives who mentor Master's Degree students of AD: 520 Corporate Strategy/Management Simulation course given by

Management Department - Bogazici University. The study is conducted on 7 April 2009 at the faculty's meeting room. There are four participants and the discussions lasted for forty five minutes. It is ensured that no single individual dominated the discussions. The discussions are concentrated and focused well on the topic so the moderator only intervened for asking new questions. The content analysis results are given in Table 20.

Table 20. Content Analysis Results of the Second Focus Group Study

<i>Items, words, phrases</i>	<i>Frequency</i>
Risk taking	22
Management of CE (strategy, processes)	9
Organizational culture	7
Vision	5
Institutionalization	4
The leader is very important	4
Support, rewards and reinforcement are crucial	4
Sustainability	3
Innovation	3
Proactiveness	3
Opportunity recognition	3
Spirit	2
Competitiveness	2
The end result/output/value is very important	1

The third focus group involved participants working in the private sector with two to five years of work experience and with an MBA degree. This focus group is conducted among participants working in different companies from five different sectors (high-tech, consulting, textile, FMCG) with two to five years of work experience. The study is conducted on 9 May 2009 and lasted for one hour. This focus group is less structured than the first two and the level of intervention by the moderator is very low. However, at some points the moderator had to intervene when there is divergence from the topic. The content analysis results are given in

Table 21.

Table 21. Content Analysis Results of the Third Focus Group Study

<i>Items, words, phrases</i>	<i>Frequency</i>
New product/service/market/process	28
Risk taking	14
The leader is very important	7
Management of CE (strategy, policy, processes)	6
Aggressiveness	6
The influence of different industry/environment is important	4
Support, rewards and reinforcement are crucial	3
Spirit	2
Opportunity recognition	2
Organizational culture is important	2
Proactiveness	2

The last group participants are general managers of large companies from five different industries (two FMCG, one high-tech, one textile, and one shipment company). The focus group study is held on 23 April 2009 in Bogazici University Graduates Association and lasted for two hours and fifteen minutes. The participants are founders or general managers of companies, so they are key informants about the discussions on organizational culture and their effect on corporate entrepreneurship. The content analysis results are given in Table 22.

The content analysis of each interview and focus group are then analyzed in detail. According to the findings, firm-level entrepreneurship involves innovation, proactiveness, and risk taking. While innovation and proactiveness are essential, there is agreement that firm-level entrepreneurship definitely involves risk taking. There is also agreement that there are different types of entrepreneurial activities since there are different levels of risk involved in each different activity. Moreover, firm-level entrepreneurship is accepted to be a larger concept than innovation.

Table 22. Content Analysis Results of the Fourth Focus Group Study

<i>Items, words, phrases</i>	<i>Frequency</i>
New product/service/market/process	9
Organizational culture is very important in determining CE	9
Management of CE (strategy, policy, processes)	7
The leader/CEO/founder is very important is CE	6
Risk taking	6
The leader effects the culture which then effects CE	5
Spirit/motivation is crucial	4
Proactiveness	5
Tolerance for failure	3
Team work	1
Support, rewards and reinforcement are crucial	1
Opportunity recognition	1
Growth orientation	1
Opportunity recognition	1
The end result/output/value is very important	1

The term innovation is adopted more frequently in their daily work life when compared to the term entrepreneurship. However, when the participants elaborated on the concept, it is discovered that innovative activities are part of an entrepreneurial process in the companies. More specifically, innovation is perceived as a tool that organizations use like many other tools (e.g., corporate acquisitions) in order to be more entrepreneurial. The characteristics, attitudes, abilities, and the inspiration of the leader/founder/CEO are found to have an important influence on firm-level entrepreneurship. Actually, it can be stated that the presence of a leader that values entrepreneurship determines whether the organization engages in entrepreneurial actions or not. Organizational culture is also believed to have an influence over firm-level entrepreneurship, however there is a general tendency to believe that the leader creates the culture. Therefore, the effect of the leader on firm-level entrepreneurship is suggested to be higher when compared to the effect of culture. The atmosphere within the organization is

suggested to have an influence on firm-level entrepreneurship. When there is an attempt to initiate an entrepreneurial activity, the organizational environment needs to foster it. Rewards and reinforcement are among important stimulators of corporate entrepreneurship. Although the relationship between corporate entrepreneurship and organizational performance is not very clear, there is a general belief that there should be supporting mechanisms - strategy, structure, process- in order for entrepreneurial activities to be successful.

Method

In this part, the sampling plan of the quantitative study, the data collection procedure, and the measures adopted in the questionnaire will be discussed.

Sampling Plan

The current study focuses on manufacturing and service industries for the collection of quantitative data. In order to achieve more generalizable results, data for the qualitative and quantitative parts of the research are collected from the same industries. Accordingly, automotive and food industry from manufacturing and telecommunications and banking industries from service industries are chosen.

Automobile industry plays an important role both for the industrialization and export potential of Turkey. It is a locomotive industry considering its potential impacts on national development, employment, and technological impact (Yilmaz,

2008). According to Automotive Manufacturers Association, as of 2009, five automotive companies are among the first fifty companies that earn the highest profits and nine automotive companies are among the first fifty companies that reach the highest level of exports, among the Turkish biggest 500 industrial companies. Eraslan and Bulu (2004) stated that, technological innovation is becoming an important concern for the industry. In a study analyzing the effects of corporate entrepreneurship on business performance in the Turkish automotive industry, it has been found that innovativeness and new business venturing dimensions of corporate entrepreneurship increased business performance (Zehir & Eren, 2007). Therefore, analysis of firm-level entrepreneurship with its antecedents and organizational level outcomes is highly important for automotive industry.

Another important manufacturing industry for Turkey is the food industry. Food industry is one of the industries that the country aims to create a competitive advantage in international markets (Öndoğan, 2004). According to The State Planning Organization report (2004), food industry contributes 5% of gross national product (GNP) and around 20% share in total production of the manufacturing industry. Most of the companies in the Turkish food industry are small and medium sized organizations (Düzenli, 2000). Considering the growing potential of the industry (Öndoğan, 2004), the importance of entrepreneurship and innovation are also increasing for these small and medium sized companies. Earle (1997) also emphasizes the importance of innovation for the food industry.

Turkish banking industry has been liberalized since 1980s and since then major institutional changes have been observed in the industry to increase

competitiveness (Denizer, 1999). After liberalization, the industry experienced a very high growth rate. The total number of banks increased from 43 in 1980 to 79 in 2000 (Telci, 2009). However, especially after September 2000 and February 2001 crises in Turkey, a sharp fall in the number of banks was observed and the industry started to be strictly audited by the Banking Regulation and Supervision Agency. While the strict regulation by the agency restricts the entrepreneurial capacity of companies in the industry (e.g., the amount of rules and regulations applied during new product introduction process), entrepreneurship is still important for the industry. For instance, Turkish banks are increasingly being interested in establishing joint partnerships abroad (Isik & Hassan, 2002).

Lastly, telecommunication industry which involves fixed-line, mobile, internet, and broadband market have been experiencing an increased level of competition over the last years especially after the privatization of the incumbent operator in fixed-line market (Atiyas, 2005). The regulatory changes in the global telecommunications industry affected Turkey's telecommunication industry in terms of liberalization (OECD, 2002). With liberalization, the number of companies operating in the industry increased, which in turn increased the competition level. In such a competitive environment, innovation and entrepreneurship became a priority for the organizations. Telecommunications is an industry where firm-level entrepreneurship has increasingly become the main focus (Allen & Hevert, 2007; Lin & Lee, 2009).

The collection of firm-level information through the questionnaire method has certain limitations in the Turkish business context. First, the respondents often

do not want to reveal information about their company due to confidentiality. Second, because firm-level data generally requires information from the top management levels, the respondents do not usually have ample time to respond. Considering these, the collection of the questionnaires is done through face-to-face interviewing and this process is carried out by a professional market research company³.

The sampling method of the study is convenience and quota sampling among non-probability sampling methods (Kotler & Keller, 2009). Most of the companies in automotive, telecommunications and nearly all of the banks are situated in Istanbul. Although there are multiple food companies in other cities of Turkey, in the current study the sample is selected from companies operating in Istanbul. The sampling method is quota sampling, because the number of companies targeted in each of the four industries reflected the distribution in the population (the highest number of companies are from food industry, followed by automotive industry, then by telecommunications industry, and then by banking industry).

Data Collection

Based on convenience and quota sampling, the professional market research company determined a sample of companies from automotive, food, telecommunications, and banking industry. It is convenience sampling because the company planned to contact a sample of companies from each industry which the

³ This stage of the project was funded by Bogazici University Research Fund, project code 09HC103D, 2009-2010.

company had contacted in previous studies. Accordingly, based on this process the total sample size is 442 companies. Once the sample is determined, an appointment is targeted to be scheduled in each company with a manager from top management. First, general manager, chief executive officer, assistant general manager, or the owner are targeted. According to Zahra (1991), because top management knows every detail of the company, data is usually collected from top management in the study of corporate entrepreneurship. If top management can not be contacted, an appointment is made with a manager from middle management. During the interviews the questionnaire is explained in detail and then the respondents are given time to answer without any intervention.

In order to eliminate single respondent bias, multiple respondents are surveyed during data collection. After the first questionnaire which is answered by the highest ranking member possible, at least two more interviews are requested. In 442 sample companies, 1300 people are contacted. The final sample size included 118 companies and 324 respondents yielding a response rate of approximately 27% at the firm-level and 25% at the individual-level. In nineteen companies there are single respondents and multiple respondents are surveyed in the remaining ninety nine companies (ranging from two to seven respondents in each company).

Out of 118 companies, 114 provided information about their industry, size, and age. In the end, the study sample included twenty eight companies from banking, fifty seven from food, twenty four from automotive, and nine from telecommunications industries. Fifty nine companies had less than 250 employees.

According to Undersecretariat of Treasury, companies that have less than 250 employees are considered small and medium sized companies. Thirty three companies had between 250 and 1500 employees, and twenty two companies had more than 1500 employees. Lastly, twenty companies are operating for less than ten years, seventy six companies are operating for between ten and fifty years, and eighteen companies are operating for more than fifty years. When the respondents' positions in the company are analyzed, it is observed that only 304 respondents provided their position information. Twenty five respondents are from top management, 279 respondents are from middle or lower-middle management including managers, manager assistants, customer representatives or specialists.

Measures

For the measurement of the constructs in the conceptual model, measures from the extant literature are combined with measures developed from the content analyses of the semi-structured interviews and focus groups. The measures are translated by a doctoral student who is a research assistant at Bogazici University International Trade Department. The translation is made item by item and back translation is carried out by another researcher in cases where there is ambiguity about the item.

Once the translation is made, the questionnaire is structured and a pilot test is conducted. The questionnaires are sent to respondents through convenience and snow ball sampling methods. Twenty two questionnaires are collected in total due to time restrictions. Although the sample size is too small to compute statistical

analysis, the reliabilities are computed for each dimension in the model and the results are found to be satisfactory. The reliability statistics can be found in Appendix C.

Although statistical analysis is not achieved due to small sample size of the pilot study, the feedbacks from respondents are taken into account for measure purification. The feedbacks are mostly about the length of the questionnaire, lack of clarity regarding the answering process and the phrasing, and item repetition problems due to translation to Turkish. The questionnaire is revised by considering all the relevant feedback. The revised version of the questionnaire is again tested with research assistants at Bogazici University International Trade Department. Based on their feedback, which are minor, the final version of the questionnaire is developed, which is available in Appendix B. In the following part, information regarding the measurement of each construct in the questionnaire is given in detail.

Organizational Culture

Organizational Culture Assessment Instrument (OCAI) (Cameron & Quinn, 1999) is used for the diagnosis of organizational culture. The instrument assesses organizational culture on six core dimensions: dominant characteristics (what the overall organization is like), leadership style (the leadership approach that pervades the organization), management of employees (how employees are treated and what organizational environment is like), organizational glue (attachment mechanism that hold the organization), strategic emphasis (what drives organizations strategy), and criteria of success (what is valued and rewarded). The

scale includes four different statements suitable for each type of organizational culture (i.e., clan, adhocracy, hierarchy and market) and is suggested to be a reliable measure by Cameron and Quinn (1999) “sufficient evidence has been produced regarding the reliability of the OCAI to create confidence that it matches or exceeds the reliability of the most commonly used instruments in the social and organizational sciences” (p. 140).

The original measurement is a ratio scale and requires respondents to distribute one hundred points among four different articulations of core dimensions (for every culture type). Based on the results and feedback of the pilot study, the phrases are condensed and the respondents are asked to rank four statements instead of distributing one hundred points among four different articulations. The organizational culture measure as adopted in the questionnaire is given in Table 23.

Table 23. Organizational Culture Assessment Instrument (OCAI)

<i>Dominant Characteristics</i>	Rank
A The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.	
B The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.	
C The organization is very results oriented. A major concern is getting the job done. People are very competitive and	
D The organization is a very controlled and structured place. Formal procedures generally govern what people do.	
<i>Organizational Leadership</i>	Rank
A The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.	
B The leadership in the organization is generally considered to exemplify entrepreneurship, innovating, or risk taking.	
C The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.	
D The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.	
<i>Management of Employees</i>	Rank

-
- A The management style in the organization is characterized by teamwork, consensus, and participation.
 - B The management style in the organization is characterized by individual risk-taking, innovation, freedom, and uniqueness.
 - C The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.
 - D The management style in the organization is characterized by security of employment, conformity, predictability, and stability
-

Organization Glue

Rank

-
- A The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.
 - B The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on
 - C The glue that holds the organization together is the emphasis on achievement and goal accomplishment. Aggressiveness and
 - D The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is
-

Strategic Emphasis

Rank

-
- A The organization emphasizes human development. High trust, openness, and participation persist.
 - B The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for
 - C The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the
 - D The organization emphasizes permanence and stability. Efficiency, control, and smooth operations are important.
-

Criteria for Success

Rank

-
- A The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and
 - B The organization defines success on the basis of having the most unique or newest products. It is a product leader and innovator.
 - C The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market
 - D The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost
-

Leadership types

Competing Values Framework Managerial Behavior Instrument developed by

Lawrence et al. (2009) is adopted in the current study to measure different

leadership types in companies. The original measure involves thirty six items that

are more related to leadership types in middle management level. Since the unit of analysis in the current research is firm-level, leadership is asked as the “top management leadership” and the main sub-categories of the four leadership types are adopted for the measurement of top management leadership. The final twelve questionnaire items are measured with 5-point Likert scale (1=strongly disagree, 5=strongly agree)

Table 24. Competing Values Framework Leadership Types

<i>Collaborate</i>	<i>Create</i>
1. Encouraging participation	4. Anticipating customer needs
2. Developing people	5. Initiating significant change
3. Acknowledging personal needs	6. Inspiring people to exceed expectations
<i>Control</i>	<i>Compete</i>
7. Clarifying policies	10. Focusing on competition
8. Expecting accurate work	11. Showing a hard work ethic
9. Controlling projects	12. Emphasizing speed

Entrepreneurial Posture

Entrepreneurial posture is operationalized with four dimensions of innovativeness, risk-taking, proactiveness, and competitive aggressiveness. Items of Entrepreneurial Orientation scale first developed by Khandwalla (1977) and further refined by Miller and Friesen (1982) and Covin and Slevin (1989) and items of Corporate Entrepreneurship scale developed by Zahra (1993a) are used to measure the construct. Moreover, two items for proactiveness and competitive aggressiveness dimensions are adopted from Lumpkin and Dess (2001).

Entrepreneurship Orientation scale is 7-point semantic differential scale while Corporate Entrepreneurship scale is 5-point interval scale. Therefore, to ensure unity of measurement three items adapted from Zahra (1993a) are measured with

7-point semantic differential scale instead of the original 5-point interval scale.

Table 25. Measures of Entrepreneurial Posture

Dimension	Source
<i>Innovativeness</i>	
In general, the top managers of my company favor a strong emphasis on the marketing of tried and true products or services - R&D, technological leadership, and innovations.	Miller and Friesen (1982), Covin and Slevin (1989), Knight (1997)
My company underestimates - emphasizes new product development.	Zahra (1993a)
My company underestimates – emphasizes technological innovation.	Zahra (1993a)
My company underestimates – emphasizes pioneering technological developments in its industry.	Zahra (1993a)
<i>Risk-taking</i>	
In general, the top managers of my company have a strong proclivity for low-risk projects (with normal and certain rates of return) – for high-risk projects (with chances of very high returns)	Miller and Friesen (1982), Covin and Slevin (1989)
In general, the top managers of my company believe that owing to the nature of the environment, it is best to explore it gradually via timid, incremental behavior – bold, wide-ranging acts are necessary to achieve the firm’s objectives.	Miller and Friesen (1982), Covin and Slevin (1989)
<i>Proactiveness</i>	
In dealing with its competitors, my company typically responds to actions which competitors initiate – typically initiates actions which competitors then respond to.	Miller and Friesen (1982), Covin and Slevin (1989), Lumpkin and Dess (2001)
In dealing with its competitors, my company is very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc. – is very often first business to introduce new products/services, administrative techniques, operating technologies, etc.	Miller and Friesen (1982), Covin and Slevin (1989), Lumpkin and Dess (2001), Knight (1997)
In general the top managers of my company have a strong tendency to ‘follow the leader’ in introducing new products or ideas – to be ahead of other competitors in introducing novel ideas or products.	Lumpkin and Dess (2001)
<i>Competitive Aggressiveness</i>	
My company is very aggressive and intensely competitive – makes no special effort to take business from the competition.	Lumpkin and Dess (2001)
In dealing with its competitors, my company typically seeks to avoid competition clashes, preferring a ‘live-and-let-live’ posture – adopts a very competitive ‘undo-the-competitors’ posture.	Miller and Friesen (1982), Covin and Slevin (1989), Lumpkin and Dess (2001), Knight (1997)

Firm-level Entrepreneurial Activities

The current study hypothesizes four different type of entrepreneurial activities: innovation/venturing, organizational renewal, strategic renewal, and domain redefinition. The original measurement involved seventeen items from Corporate Entrepreneurship scale (Zahra, 1993a), Two items from Entrepreneurship Orientation scale (Covin & Slevin, 1989; Miller & Friesen, 1982), and eight items generated by the researcher based on the literature review, discussions in Lumpkin and Dess (2001), and qualitative analysis of semi-structured interviews and focus groups. After the pilot study feedbacks, three items from Corporate Entrepreneurship scale (Zahra, 1993a) and two items developed by the researcher are excluded in the final version of the questionnaire. These items are excluded because they produced similar meanings to other items due to translation into Turkish. All the remaining twenty two items are asked with 5-point Likert scale (1=strongly disagree, 5=strongly agree).

Table 26. Measures of Different Entrepreneurial Activities

Dimension	Source
<i>Innovation / Venturing</i>	
My company has marketed no new lines of products or services – very many new lines of products and services in the past 5 years.	Miller and Friesen (1982), Covin and Slevin (1989), Knight (1997)
Changes in product or service lines have been mostly of a minor nature – changes in product or service lines have usually been quite dramatic.	Miller and Friesen (1982), Covin and Slevin (1989), Knight (1997)
My company's spending on new product development activities has changed significantly.	Zahra (1993a)
My company's emphasis on creating proprietary technology has changed significantly.	Zahra (1993a)
My company has emphasized stimulating new demand on existing products in current markets.	Zahra (1993a)
My company has emphasized broadening business lines in current industries.	Zahra (1993a)

My company has emphasized pursuing new businesses in new industries that are related to current businesses.	Zahra (1993a)
My company has emphasized finding new niches for its products in current markets.	Zahra (1993a)
My company has emphasized entering new businesses by offering new lines and products.	Zahra (1993a)
<i>Organizational renewal</i>	
My company has emphasized reorganizing units and divisions to increase innovation.	Zahra (1993a)
My company has emphasized coordinated activities among units to enhance company innovation.	Zahra (1993a)
My company has emphasized adopting flexible organizational structures to increase innovation.	Zahra (1993a)
My company has emphasized establishing procedures to solicit employee ideas for innovation.	Zahra (1993a)
My company has emphasized designating formal idea champions.	Zahra (1993a)
My company has emphasized team-work to increase innovation.	Researcher based on interviews and focus group studies
<i>Strategic Renewal</i>	
My company has emphasized revisiting its business concept.	Zahra (1993a)
My company has emphasized redefining the industries in which it will compete.	Zahra (1993a)
My company has emphasized implementing new business strategies to exploit available product-market opportunities.	Researcher based on Lumpkin and Dess (2001)
My company has emphasized establishing strategic relationships with co-partners.	Researcher based on interviews and focus group studies
My company has emphasized major changes in its growth strategies.	Researcher based on interviews and focus group studies
<i>Domain Redefinition</i>	
My company changed the rules of competitive engagement.	Researcher based on interviews and focus group studies
My company has moved the competitive battle to a new arena.	Researcher based on Lumpkin and Dess (2001)

Organizational Factors

Hornsby et al. (2002) developed the Corporate Entrepreneurship Assessment Instrument to measure the key internal organizational factors that influence corporate entrepreneurship activities. The instrument is composed of five dimensions of management support, work discretion, rewards/reinforcement, time availability, and organizational boundaries and included forty three items. The pilot study feedbacks concentrated on the length of this part of the questionnaire. Therefore, this part of the questionnaire is shortened considerably. Three items for each five sub-categories of the scale are adopted and the final measurement included 15 items. This scale adopted is measured with 5-point Likert scale (1=strongly disagree, 5=strongly agree).

Table 27. Corporate Entrepreneurship Assessment Instrument (CEAI)

Management support for corporate entrepreneurship

Individual risk takers are often recognized for their willingness to
People are often encouraged to take calculated risks with new
This organization supports many small and experimental projects

Work discretion

I have the freedom to decide what I do on my job.
It is basically my own responsibility to decide how my job gets
I almost always get to decide what I do on my job.

Rewards/reinforcement

The rewards I receive are dependent upon my work on the job.
My supervisor will give me special recognition if my work
My manager would tell his boss if my work was outstanding.

Time availability

During the past three months, my work load was too heavy to
I always seem to have plenty of time to get everything done.
I feel that I am always working with time constraints on my job.

Organizational boundaries

In the past three months, I have always followed standard

On my job I have no doubt of what is expected of me.
I clearly know what level of work performance is expected from

Organizational Performance

Organizational performance measures are adopted from İşeri Say et al. (2008). All of the measures are assessed by asking the average level of organizational performance in the last three years. Financial performance involves six items and qualitative performance involves nine items. Respondents are asked “indicate your company performance in comparison to competition considering the past 3 years”. The items are measured with 5-point Likert scale (1=much worse than competition; 5=much better than competition).

Table 28. Organizational Performance Measures

<i>Financial Performance</i>
sales growth
return on sales
return on assets
market share
ability to introduce new products/services before competitors
flexible pricing strategies
<i>Qualitative performance</i>
product/service design
product/service quality
flexibility in product/service introduction
employee satisfaction
employee commitment
qualified personnel
customer satisfaction
customer loyalty
understanding the customer

Control Variables

Company size is measured by asking the total number of employees in the company. *Company age* is measured by asking the number of years the company

has been in operation. *Industry* is determined by asking the company's main scope of operations.

Table 29. Control Variables

Total number of employees as of today:
Number of years your company is in operation:
Main are of industrial operations:

Quantitative Analysis and Results

In this section of the chapter, the measurement model is discussed in detail and the hypotheses are tested in the conceptual model in the conceptual model.

Measurement Model

This part of the section first presents data assessment. Next, details on how measurement is achieved is presented, followed by the analysis results regarding differentiation between entrepreneurial posture and activities. The part then continues with confirmatory factor analysis results and finally presents the revised conceptual model of the quantitative part of the research.

Data assessment

Before analysis, data is assessed for normality, linearity, homoscedasticity, and multicollinearity. For the assessment of normality, Kolmogorov-Smirnov tests are

conducted for all the items in the analysis (results are in Table 39 in Appendix C). The results indicate that sixty-five items of 101 items in the measurement instrument have a normal distribution. The items that do not have normal distribution are mainly the items of top management leadership and organizational performance constructs. The reason behind these is the negative skewness observed in these items. Several transformations are tried such as taking the square root or the inverse, yet a normal distribution is not achieved.

For the assessment of linearity a regression analysis is run with the dependent variables of financial performance and qualitative performance and the independent variables of four types of organizational culture and four types of top management leadership constructs. For independent variables the average of items of each construct is taken to create a composite indicant for each independent construct. When the residuals and resulting scatter plots for each dependent variable (Fig. 11 and Fig. 12 in Appendix C) are examined it is observed that there is not a linearity problem in the data.

For the assessment of homoscedasticity of the dependent variables of financial and qualitative performance are tested through Levene statistics. The results suggest that (Table 40 in Appendix C) financial performance measure has equal variances across groups of industry, size, and age. Therefore there is no homoscedasticity problem for financial performance. Homoscedasticity is achieved for qualitative performance partially. While there is no problem for size and age, the significant F value suggests that qualitative performance across different industries differ. This may be because nearly 83 % of companies are from food and

automotive industry and the qualitative performance of companies in these and companies in banking and telecommunication industries are quite different.

Lastly, to test for multicollinearity among independent variables, regression analysis is run with one of the organizational performance measures. Hair, Black, Babin, and Anderson (2010) stated that, tolerance values lower than 0.9 and VIF (variance inflation factor) values higher than 10 indicate multicollinearity problems among variables. The results (Table 41 in Appendix C) indicate that tolerance values are lower than 0.9 however since VIF values are still lower than 10, it can be stated that there is not a serious multicollienarity problem among variables.

Measurement

Measurement analysis are conducted at the individual level (N=324).

The measures are first tested to understand the dimensionality of constructs.

Exploratory factor analysis with principal component extraction and varimax rotation method are conducted and using a cut-off point of Eigenvalues greater than one, factors are extracted, reliability measures are computed and constructs are purified.

After the exploratory factor analysis, it is found that there are four different organizational culture types as proposed by the measure. Each of these types is measured with six items. Individual exploratory factor analysis is also conducted for each organizational culture type to observe the unidimensionality and all the types are found to be unidimensional. Next reliability statistics are computed for each

organizational culture and item-total correlations are analyzed. This analysis resulted in deletion of certain items. If the item-total correlation of the item is low compared to the other item-total correlations and when the deletion resulted in an increase in Cronbach Alpha of the measure then the item is excluded from the analysis. After exclusion reliability statistics are calculated again it is found that Cronbach Alpha values are acceptable for hierarchy ($\alpha=.79$, $n= 5$ items), market ($\alpha=.68$, $n=4$ items), clan ($\alpha=.65$, $n=3$ items) except for adhocracy culture ($\alpha=.48$, $n=2$ items). Accordingly, adhocracy culture type and related hypothesis (H4 and H5) of the construct are excluded from the analysis.

The original leadership scale proposed four different leadership types but the items are aimed at middle-management level. The measure is adapted for measuring top management leadership. Accordingly, the exploratory factor analyses for top management leadership construct extracted two factors contrary to the proposed measure. This can mainly be attributed to the revisions made to the scale. The analysis results show that four items have cross-loadings on the extracted two factors. Accordingly, these are excluded from the measure. The first factor involves all the three items of collaborate and the two items of create type of leadership. In other words, this first type of top management leadership emphasized more flexibility dimension of CVF with both internal and external orientation. Accordingly, this factor is named as *flexibility-oriented leadership*. The reliability of this type of top management leadership is acceptable ($\alpha=.84$, $n=5$ item). The second factor involves two items from compete type of leadership and one item from control type of leadership. When the reliability is computed and

item-total correlations are analyzed one item of compete type of leadership is also deleted from the factor. The two items emphasized speed and accurate work and accordingly the factor is named as *speed-oriented leadership* and resultant reliability is acceptable ($\alpha=.78$, $n=2$ items). In conclusion, control, compete, collaborate, and create type of leadership types and related hypotheses (H7, H8, H9, H10, H11, and H12) are excluded from the analysis. New hypotheses are developed for new top management leadership types and will be discussed in the revised conceptual model part of this section.

The exploratory factor analysis for the entrepreneurial posture extracted two factors in contrary to four dimensional structure proposed in the conceptual model. The results indicated that one item has a cross loading on the two factors and one item has a loading lower than .40 and therefore they are excluded from the analysis. The first factor involved three items from innovativeness dimension and two items from competitive aggressiveness dimension. When the reliability is computed and item-total correlations are analyzed two competitive aggressiveness items are also excluded and resulting factor has an acceptable reliability ($\alpha=.85$, $n=3$ items). The second factor includes one item from risk-taking, one item from innovation, and two items from proactiveness. When the reliability statistics is computed and item-total correlations are analyzed the item from innovativeness dimension is excluded. The resulting factor has and acceptable level of reliability ($\alpha=.84$, $n=3$ items). Later, the aggregated measures are developed for two dimensions and the reliability is computed for entrepreneurial posture construct ($\alpha=.70$, $n=2$ items). The analysis states that the entrepreneurial posture is

multidimensional with two dimensions of innovativeness and proactiveness.

The exploratory factor analysis for the entrepreneurial activities of the companies extracted two factors contrary to expected four different activities. Ten items have very close cross-loadings between the extracted two constructs and one item has a loading low than .40, therefore these are excluded from the analysis. The first factor involved two items from innovation/venturing types, one item from strategic renewal, and one item from domain redefinition dimension and the reliability is $\alpha=.85$ with 4 items. The second factor involved two items from innovation/venturing and four items from organizational renewal and the reliability is $\alpha=.91$ with 6 items. In conclusion, strategic renewal and domain redefinition types of entrepreneurial activities and the related hypothesis (H13(c), H13(d), H16(a,b,c,d,e), H17(a,b,c,d,e) H20(a), H20(b), H21(a), and H21(b)) are excluded from the analysis.

The exploratory factor analysis for the organizational factors extracted three factors in contrary to expected five factors. The three items of organizational boundary have cross-loadings across factors therefore are excluded from the analysis. The two items related to time are also excluded because they had low level of factor loadings ($<.40$). The first factor involves all the items of management support and rewards and reinforcement dimensions and have acceptable reliabilities ($\alpha=.83$, $n=6$ items), second factor involves all three items of work discretion and has acceptable reliability ($\alpha=.83$, $n=3$ items), the last factor involved a single factor of time dimension. Accordingly, with the removal of organizational boundary dimension the related hypothesis are excluded from the analysis (H14(e)

and H15(e)).

Lastly, the exploratory factor analysis for organizational performance items extracted two factors as expected by the model. One item of competitive positioning has very close cross-loading between two factors and therefore is excluded from the analysis. The first factor involves financial and competitive positioning indicators. When the reliability is computed and item-total correlations are analyzed competitive positioning items are deleted and resulting factor has an acceptable level of reliability ($\alpha=.93$, $n=3$ items). The second factor involves performance capability, organizational integrity, and customer equity dimension items. When reliability is computed and item-total correlations are analyzed one organizational integrity item and one customer equity item is deleted and the factor has an acceptable level of reliability ($\alpha=.91$, $n=7$ items). Overall, the inclusion and exclusion of items in the analysis are presented in detail in Table 42 in Appendix C.

Differentiating Between Entrepreneurial Posture and Activities

The current research aims to differentiate between entrepreneurial posture and entrepreneurial activities. To explore whether dimensions of entrepreneurial posture and entrepreneurial activities are actually different constructs of firm-level entrepreneurship, exploratory factor analysis is computed with principal component extraction and varimax rotation. Three items of innovativeness, three items of proactiveness, four items of innovation/venturing, and six items of organizational renewal are included in exploratory factor analysis and it is found

that the items extracted four different factors as expected (see Table 30). The KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy is .925 and Barlett's Test of Sphericity is found to be significant ($p < .01$). Additionally, total variance extracted is 73%. Accordingly, it is found that the measured items of firm-level entrepreneurship measure different aspects of the phenomenon.

To test whether there is multicollinearity problems among constructs, multiple regression analysis is run with dependent variable of financial performance. It is observed that tolerance values are not higher than 0.9 (.594 for innovativeness, .623 for proactiveness, .492 for innovation/venturing, and .462 for organizational renewal) but still VIF values are lower than 10 (1.685 for innovativeness, 1.605 for proactiveness, 2.033 for innovation/venturing, and 2.162 for organizational renewal) which shows that there is not a severe multicollinearity problem according to Hair et al. (2010).

Confirmatory Factor Analysis

Once the construct measures are purified with exploratory factor analysis and the analysis of reliability statistics, confirmatory factor analysis is conducted by using maximum likelihood estimation procedure in AMOS 18. The measurement model

Table 30. Rotated Component Matrix

items	1	2	3	4
procedure to solicit innovative ideas	.814			
team-work to increase innovation	.803			
coordination among units to increase coordination	.776			
flexible organizational structures for innovation	.740			
spending on new product development	.681			
creating propriety technology	.654			
dramatic changes in product and service lines		.785		
major changes in growth strategies		.740		
introducing new product and service lines		.731		
changed the rules of competition		.707		
pioneering technological development			.864	
emphasizing technological innovation			.795	
emphasizing new product development			.731	
strong proclivity for high-risky projects				.825
initiates actions which competitors than respond to				.783
tendency to be ahead of competitors				.780

included hierarchy culture, market culture, clan culture, flexibility-oriented leadership, speed-oriented leadership, innovativeness, proactiveness, innovation/venturing, organizational renewal, financial performance, and qualitative performance constructs. The measurement of organizational culture is a profiling measure, resulting in four values for each organizational culture type for every organization. Accordingly, this measure is different from other measures in the measurement model. The items measuring each construct act as index values, the loadings of which are not given priority. As a result, organizational culture items are averaged to create composite indicants for each of these culture types. Therefore, organizational culture constructs are single-item constructs in the measurement model and the error terms of these single-item measures are restricted to 10% of their observed variance. The items of all the other constructs are restricted to load on their priori extracted factors and all the constructs are

allowed to correlate with each other in the measurement model.

The 11-factor measurement model has $\chi^2_{(542)} = 938, p < 0.01$. Contrary to other multivariate analysis, nonsignificant chi square is desired in confirmatory factor analysis to confirm that observed and estimated covariance matrix is not significantly different from each other (Hair et al., 2010). The chi-square test is sensitive to sample size and the number of parameters in the model. Accordingly, given the high number of parameters in the measurement model, a highly significant chi-square is expected (Hair et al., 2010). However, the comparative fit index (CFI) = .945, goodness-of-fit index (GOF) = .861, root mean square residual (RMR) = .062, root mean square error of approximation (RMSEA) = .048 indicate that the measurement model fits the observed covariances well and according to Hair et al. (2010) they are within the acceptable limits.

The analysis of standardized path coefficients and squared multiple correlations reveal that exclusion of three items would result in better measurement. Two items from qualitative performance construct that are related to organizational integrity and one item from speed-oriented leadership construct that is related to control type of leadership are excluded. Accordingly, speed-oriented leadership became a single-item construct and therefore its variance is restricted to 10% of the items variance.

The second confirmatory factor analysis resulted in $\chi^2_{(444)} = 713, p < 0.01$. Given the high number of parameters in the measurement model, chi-square is significant as expected. However, the comparative fit index (CFI) = .960, goodness-of-fit index (GOF) = .884, root mean square residual (RMR) = .059, root mean

square error of approximation (RMSEA) = .043 indicate that the measurement model fits the observed covariances well and according to Hair et al. (2010) they are within the acceptable limits.

All the items loaded significantly ($p < .01$) on the constructs indicating the convergent validity (item loadings of multi-item constructs and Cronbach Alpha values are available in Table 43 in Appendix C). For the analysis of discriminant validity average variance extracted is computed for each construct and compared to squared intercorrelations with other constructs. It is found that all the extracted variances are larger than corresponding shared variance with other constructs, therefore discriminant validity is achieved. This finding also confirms the exploratory factor analysis results which state that the entrepreneurial posture and entrepreneurial activities constructs are different constructs at firm-level entrepreneurship. Because the Cronbach Alpha values of constructs are all greater than .70, reliability is also achieved. In conclusion, the adopted measures are found to be valid and reliable.

The descriptive statistics and correlations are given in Table 31. The correlations show that hierarchy culture has significant positive correlations (except for financial performance) and clan culture has significant negative correlations (except for financial performance) with other constructs in the model. Significant relationships for market culture is only established with clan culture (negative), flexibility-oriented leader and financial performance (both positive). Flexibility-oriented leadership has significant positive correlations with all other constructs. Speed-oriented leadership also has a significant positive correlations with other

Table 31. Descriptive Statistics and Correlations

Constructs	Mean	S. D.	AVE	1	2	3	4	5	6	7	8	9	10
1 hierarchy culture	2.44	0.89	NA	NA									
2 market culture	2.69	0.76	NA	-.05	NA								
3 clan culture	2.05	0.83	NA	-.38**	-.68**	NA							
4 flexibility-oriented leadership	3.84	0.81	0.72	.18**	.30**	-.46**	.84						
5 speed-oriented leadership	4.19	0.84	NA	.14*	.10	-.30**	.50**	NA					
6 entrepreneurial posture	5.09	1.32	0.56	.23**	.09	-.23**	.48**	.34**	.70				
7 innovation/venturing	3.81	0.92	0.60	.25**	.06	-.19**	.41**	.31**	.56**	.85			
8 organizational renewal	3.67	0.88	0.64	.18**	.10	-.29**	.64**	.36**	.59**	.68**	.91		
9 financial performance	3.58	0.91	0.83	.10	.02	-.02	.25**	.08	.33**	.38**	.37**	.93	
10 qualitative performance	3.95	0.78	0.64	.19**	.21**	-.32**	.60**	.29**	.49**	.43**	.51**	.48**	.90

* $p < .05$ (one-sided)

** $p < .01$ (one-sided)

Notes: S.D.= standard deviation, AVE=average variance extracted, NA refers to single-item measures, diagonal represent Cronbach Alpha values.

constructs except for a significant negative correlation with clan culture and nonsignificant correlations with market culture and financial performance. Entrepreneurial posture, innovation/venturing, and organizational venture have significant positive correlation with other constructs except for significant negative relationship with clan culture and nonsignificant relationship with market culture. Financial performance is only significantly correlated with flexibility-oriented leadership, entrepreneurial posture, innovation/venturing, organizational venture, and qualitative performance. Qualitative performance has significant positive correlation with other constructs except for a significant negative relationship with clan culture.

Revised Conceptual Model

The exploratory factor analysis resulted in changes in the constructs and therefore some revisions in the conceptual model are required in order to achieve better hypothesis testing. To start with, a change is observed in top management leadership construct. As a result, all the previously developed hypotheses are excluded and new hypotheses are developed. Two major constructs extracted are: flexibility-oriented leadership and speed-oriented leadership. Flexibility-oriented leadership involved encouragement for participation, initiation of significant changes, development of people, anticipating customer needs, and acknowledging personnel needs. This construct incorporated items of collaborate and create type of leadership which is previously hypothesized to have a positive relationship with

entrepreneurial posture. The flexibility-orientation emphasized by this leadership type - whether internal or external - positively influences the organization to have an entrepreneurial orientation. The collaborative style of the top management in terms of motivating organizational members through understanding their needs, together with their proactive style in terms of anticipation customer demands and initiate change, is positively related to entrepreneurial posture. Accordingly, the model predicts a positive relationship between flexibility-oriented leadership and entrepreneurial posture:

H22: There is a positive relationship between flexibility-oriented leadership and entrepreneurial posture.

Speed-oriented leadership incorporates only “emphasizing speed” item of compete type of leadership. Speed emphasis of this leadership type gives high priority to giving fast responses to emerging issues and to getting things done faster (Lawrence et al., 2009). The competitive environmental conditions of today require companies to do things before others and this requires quick responses by the company.

Compete type of leadership is also previously hypothesized to have positive relationship with entrepreneurial posture. Accordingly, current model hypothesizes a positive relationship between speed-oriented leadership and entrepreneurial posture:

H23: There is a positive relationship between speed-oriented leadership and entrepreneurial posture.

For the entrepreneurial posture, the dimensions of innovativeness and proactiveness are extracted. The originally developed entrepreneurial posture construct (Covin & Slevin, 1991) involved three dimensions of innovativeness, proactiveness, and risk taking. Although some revisions are made to the construct, these three dimensions remained as the basic dimensionalization. In the current study, while the innovativeness dimension includes solely items on innovativeness, the proactiveness dimension incorporates both proactiveness and risk taking items. This finding is also consistent with the finding by Knight (1997). Knight (1997) established cross-cultural validation of entrepreneurial orientation scale and found two major dimensions of innovativeness and proactiveness. The proactiveness dimension in Knight's (1997) study also incorporates the same item of risk-taking, as consistent with the confirmatory findings of the current study. Accordingly, two dimensional structure of the entrepreneurial posture construct is adopted.

The analysis extracted two different entrepreneurial activities. It is initially proposed to have four different types of entrepreneurial activities which are based on Covin and Miles (1999). In Covin and Miles's (1999) study four different corporate entrepreneurship forms - as named by the authors - are discussed at a conceptual level with no dimensionalization or item development. Accordingly, the items of this scale have mainly two sources. First, items are adopted from Zahra (1993a) who discussed corporate entrepreneurship with innovation/venturing and strategic renewal dimensions. Therefore, the items adopted from Zahra (1993a) are used as items of innovation/venturing and organizational renewal types of entrepreneurial activities. Second, the items are also created by the researcher

based on extant literature, interviews, and focus group studies and these constituted the items of strategic renewal and domain redefinition.

Innovation and venturing is discussed as a type of entrepreneurial activity in the majority of the studies (Guth & Ginsberg, 1990; Zahra, 1993a; Sharma & Chrisman, 1999). Organizational renewal is discussed in Zahra (1993a) under the strategic renewal dimension. Accordingly, the extraction of these two entrepreneurial activities is expected. The other two - strategic renewal and domain redefinition - are more vague types of entrepreneurial activities. But still, one item from each of these dimensions (changes in growth strategies and changed the rules of competition) loaded on innovation/venturing type of entrepreneurial activity. This may suggest that although these new activities are accepted as a type of entrepreneurial activity they still cannot be differentiated from innovation/venturing activities. In other words, a change in growth strategy (e.g., emphasizing high growth through diversification) actually results in an action such as venturing which is a type of entrepreneurial activity, therefore is simply accepted as a component of this type of entrepreneurial activity.

Lastly, organizational factors extracted management support (which involved both support and reward/reinforcement items), work discretion, and time dimensions. The selection of five factors is based on (Hornsby et al., 2002) who discussed organizational environment favoring entrepreneurship. The top management support and reward/reinforcement are not differentiated in the analysis. This may be due to perceiving the reward and reinforcement as a signal of top management supporting the entrepreneurial atmosphere in the organization.

In the revised model, three factors are adopted as moderators affecting the relationship between entrepreneurial posture and different types of entrepreneurial activities. Accordingly, the revised conceptual model is developed as presented in Fig. 8. The final list of hypotheses after the exclusions and inclusions are presented in Table 44 in Appendix C.

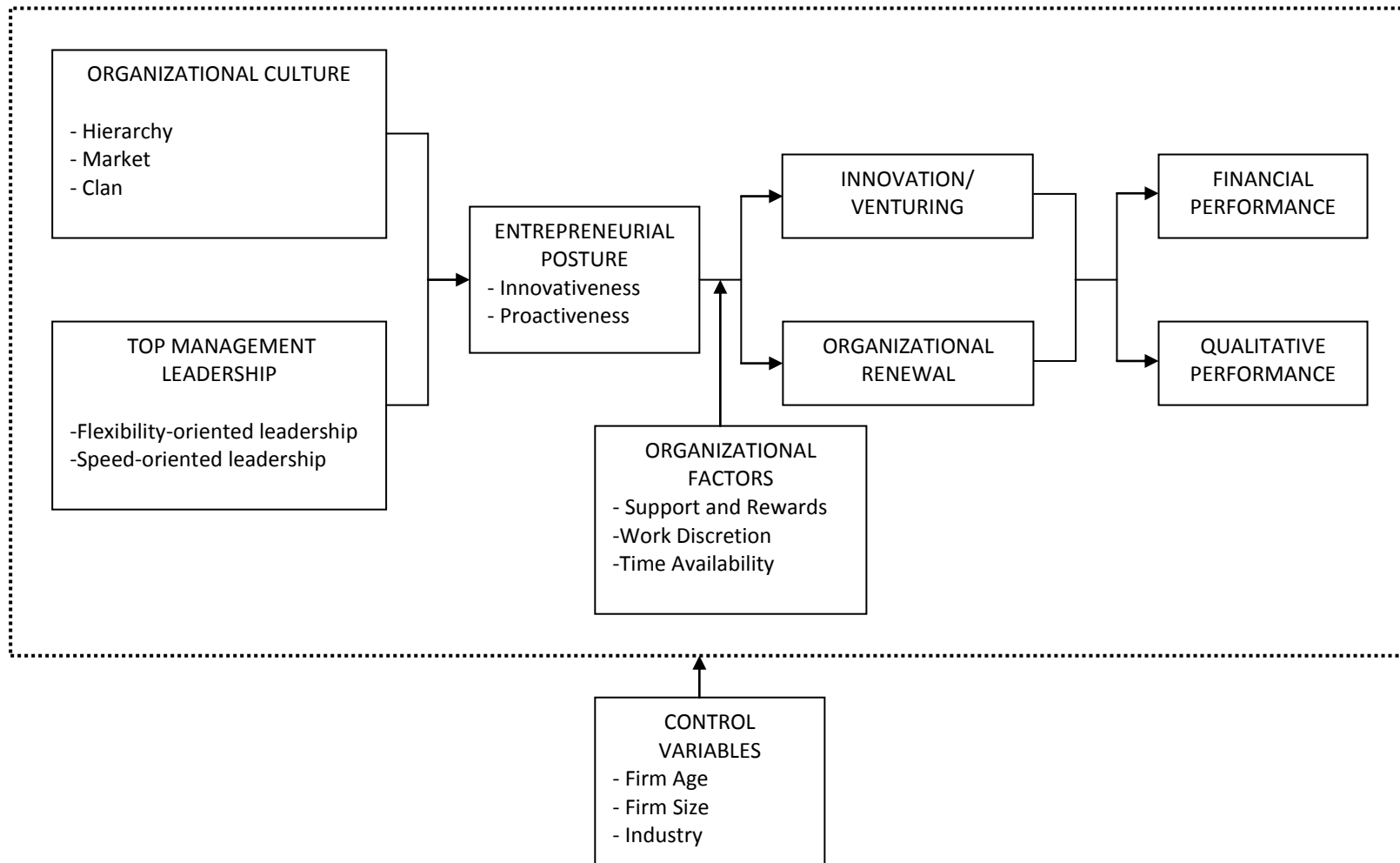


Fig. 8 Revised conceptual model

Hypothesis Testing

Firm-level data is obtained and used to test the hypotheses. First, intracorrelation coefficients are analyzed for multiple responses of each company and it is observed that the intracorrelations are significant ($p < 0.05$), suggesting that multiple responses can be averaged to have single response for every company in the data set. Accordingly, individual-level data is aggregated and further analyses are conducted with the sample of 118 companies.

The conceptual model is proposed to be controlled by age, size, and industry. Age and size are measured by asking the respondents to state their answers in numerical figures. Therefore, to understand the effect of size and age, new categorical variables are computed and ANOVA analysis is conducted for all the constructs in the conceptual model. The analysis of Levene and Scheffe statistics and corresponding significance levels showed that the control variable age have no effect on the constructs of the model. For size, although at $p < 0.1$ level, there are significant differences in means of innovation/venturing and financial performance construct. The small and medium sized companies (less than 250 employees) have significantly lower means of innovation/venturing ($p < 0.1$) and financial performance ($p < 0.1$) compared to larger companies.

In order to understand the effect of industry, ANOVA analysis is computed. The Levene and Scheffe statistics showed that there are significant differences of means for some constructs in the conceptual model. For top management leadership, there are significant differences between banking and automotive

industries. Flexibility-oriented leadership is observed significantly ($p < .01$) more in the automotive industry than the banking industry. A similar result is observed for speed-oriented leadership, where it is observed significantly ($p < .05$) more in the automotive industry than in the banking industry. No differences are found for organizational culture types between industries. For entrepreneurial posture, banking industry has significantly lower mean compared to food ($p < .01$) and automotive ($p < .01$) industry. There are no differences in means for innovation/venturing type of entrepreneurial activity, while a significant ($p < .05$) mean difference is observed for organizational renewal between the banking and automotive industry. Banking industry has significantly lower mean for organizational renewal than automotive industry. While no difference between industries is found for financial performance, there are differences in qualitative performance. It is found that, food industry has a significantly higher qualitative performance mean value compared to banking ($p < .01$) and telecommunications ($p < .05$) industries.

In conclusion, the elimination of effects of control variables on all constructs in the model are achieved by a regression analysis of dummy variables representing each industry category. In other words, the amount of variance caused by industry in each construct is eliminated thereby controlling for the effect of industry. The standardized values of constructs are then used for further testing of hypotheses.

To test the hypotheses, structural equation modeling methodology is adopted using AMOS 18. The hierarchy, market, and clan culture, and speed-oriented leadership constructs are single item constructs as discussed in the

measurement model part of this section. The flexibility-oriented leadership, innovation/venturing, organizational renewal, financial, and qualitative performance constructs are also aggregated and single indicators are used to test the hypothesized path coefficients. The entrepreneurial posture construct is represented by two items of aggregated innovativeness and proactiveness dimensions. The measurement error terms of single-item constructs are fixed at 10% of their variance and the measurement error term of entrepreneurial posture construct is fixed at 1 minus estimated coefficient alpha of the scale of each construct.

The 10-construct structural equation model resulted in $\chi^2_{(32)} = 76, p < 0.01$. This is expected given the low level of sample ($N=118$) and relatively high number of parameters in the model. The comparative fit index (CFI) = .884, goodness-of-fit index (GOF) = .903, root mean square residual (RMR) = .050, root mean square error of approximation (RMSEA) = .107 indicate that the structural model fits the observed covariances quite well. The GOF and RMR statistics are within acceptable limits according to Hair et al. (2010), but CFI and RMSEA are close to acceptable limits (CFI > .90 and RMSEA < .07). The results are mainly due to small sample size and the complex structural model. In other words, the sample is not adequately large enough to explain the relationships between the given number of constructs. Still, considering that two of the indices are within limits and the other two are close to limits the analyses are progressed with.

The hypothesized paths and the standardized regression path estimates are provided in Table 32. To start with, contrary to hypothesized, the hierarchy culture

is found to be positively related to entrepreneurial posture ($\beta=.20, p<0.05$), and market and clan culture is found to have nonsignificant relationship with entrepreneurial posture, rejecting hypotheses H1, H2, H3, and H6.

As hypothesized flexibility-oriented leadership is positively affecting entrepreneurial posture ($\beta=.78, p<0.01$), providing a support for H22. Contrary to hypothesized, speed-oriented leadership has nonsignificant effect on entrepreneurial posture, rejecting H23.

Entrepreneurial posture is positively affecting innovation/venturing ($\beta=.74, p<0.01$) and organizational renewal ($\beta=.94, p<0.01$), providing a support for H13(a) and H13(b). Innovation/venturing have no significant relationship with both financial performance and qualitative performance, rejecting H18(a) and H18(b). On the other hand, organizational renewal is positively affecting financial performance ($\beta=.36, p<0.01$) and qualitative performance ($\beta=.54, p<0.01$), providing support for H19(a) and H19(b). The resulting structural model with path estimates is presented in Fig. 9.

Table 32. Hypothesized Main Effects

Hypothesized path	β^*	t-value	Hypothesis supported
H1 hierarchy culture --> entrepreneurial posture	.201	2.406**	No
H2 market culture --> entrepreneurial posture	-.031	-.365	No
H3 clan culture --> entrepreneurial posture	.090	1.057	No
H22 flexibility-oriented leader-->entrepreneurial posture	.778	6.614***	Yes
H23 speed-oriented leader-->entrepreneurial posture	-.018	-.911	No
H13(a) entrepreneurial posture-->innovation/venturing	.739	7.138***	Yes
H13(b) entrepreneurial posture-->organizational renewal	.936	8.289***	Yes
H18(a) innovation/venturing-->financial performance	.187	1.351	No
H18(b) innovation/venturing-->qualitative performance	.122	.936	No
H19(a) organizational renewal-->financial performance	.359	2.614***	Yes
H19(b) organizational renewal-->qualitative performance	.536	4.114***	Yes

*standardized regression paths

** $p<0.05$ (one-sided)

*** $p<0.01$ (one-sided)

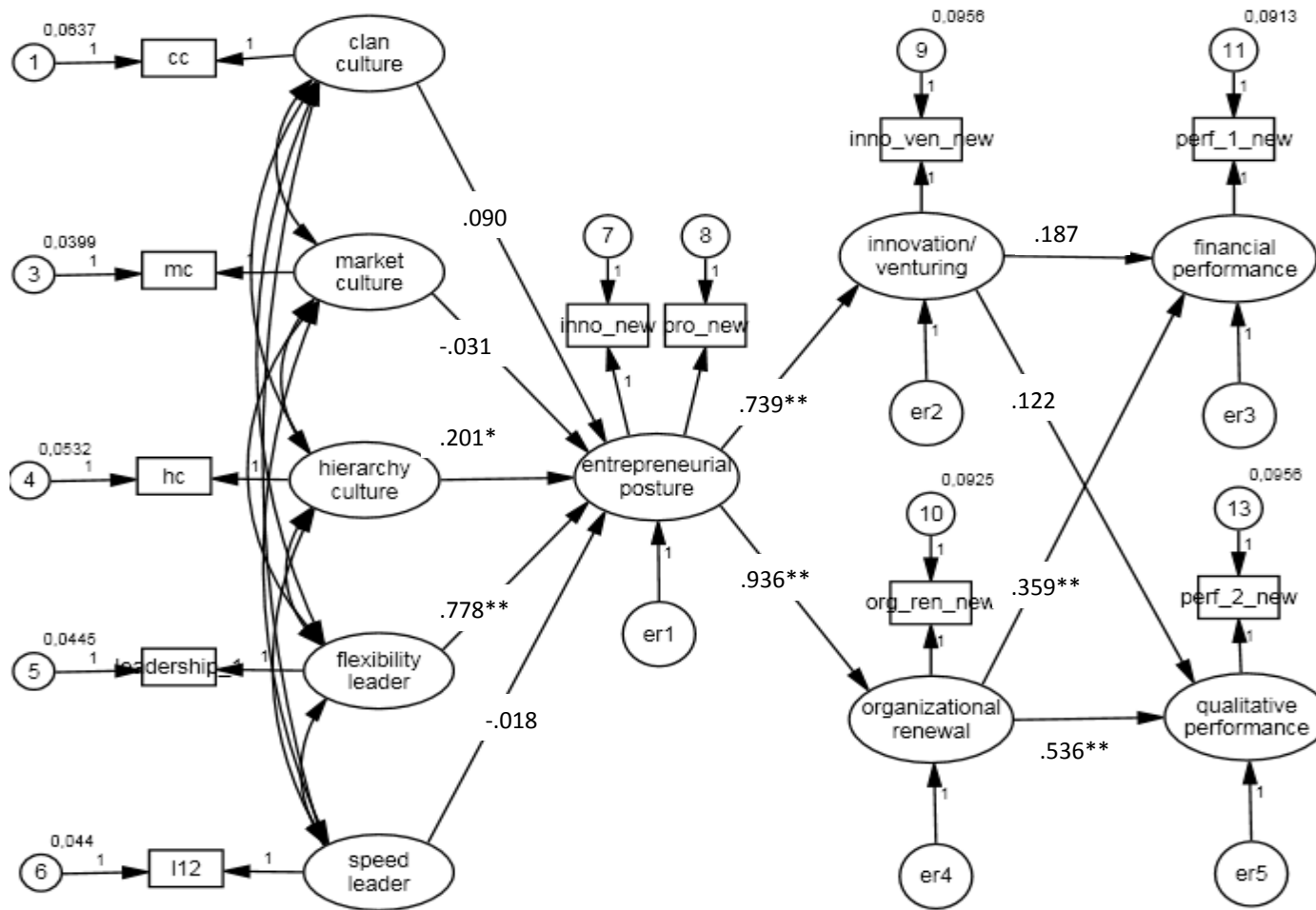


Fig. 9 The structural model

*p<0.05 (one-sided), **p<0.01 (one-sided)

When the squared multiple correlations are analyzed it is observed that 26% of variance in financial performance, 38% of variance in qualitative performance, 55% of variance in innovation/venturing, 88% of variance in organizational renewal, and 58% of variance in entrepreneurial posture are explained by their respective predictors.

The moderator variables in the revised conceptual model affect only two relationships in the model (entrepreneurial posture-innovation/venturing relationship and entrepreneurial posture-organizational renewal relationship). In other words, the moderators in the revised conceptual model are not affecting all the relationships in the model, accordingly they are not moderating the total model but specific relationships in the model. Therefore, multigroup comparisons in structural equation modeling are not appropriate for testing of moderation effects. Instead, moderated hierarchical regression analyses are performed.

First, the moderation effects between entrepreneurial posture and innovation/venturing are tested and the results are provided in Table 33. The significance of F change results suggests that there are no moderation effects in this relationship ($p < .176$) rejecting H14(a), H14(b), H14(c), H14(d). It is observed that Model 2 which involved control variables, EP, SR, WD, and TA as predictor variables have a significant F change ($p < .01$). When the coefficients of predictors are analyzed (Table 34) it is observed that size, EP and SR affect innovation/venturing as independent variables ($p < .01$). In other words, support and rewards have an independent predictor effect on innovation/venturing.

Table 33. Moderation Effects on Entrepreneurial Posture and Innovation/Venturing Relationship*

	Adjusted R ²	R ² change	F change	sig. F change
Model 1 ^a	.071	.112	2.732	.023
Model 2 ^b	.469	.399	21.191	.000
Model 3 ^c	.479	.023	1.682	.176

* Dependent variable: innovation/venturing

^aModel 1 predictors: constant, size, age, industry dummy 1, 2, 3.

^bModel 2 predictors: constant, size, age, industry dummy 1, 2, 3, entrepreneurial posture (EP), support and rewards (SR), work discretion (WD), time availability (TA).

^cModel 3 predictors: constant, size, age, industry dummy 1, 2, 3, EP, SR, WD, TA, EPxSR, EPxWD, EPxTA.

Table 34. Regression Results of Model 2

Model 2	β std.	t values	<i>p</i>
Constant		28.482	.000
Size	.221	2.501	.014
Age	.010	.145	.885
industry dummy 1	.062	.651	.516
industry dummy 2	.025	.263	.793
industry dummy 3	.044	.564	.574
entrepreneurial posture (EP)	.517	5.864	.000
support and rewards (SR)	.272	2.698	.008
work discretion (WD)	.057	.799	.426
time availability (TA)	.033	.363	.718

Second, the moderation effects between entrepreneurial posture and organizational renewal are tested and the results are provided in Table 35. The significance of F change results suggest that there is moderation at $p < .1$ significance level.

Table 35. Moderation Effects on Entrepreneurial Posture and Organizational Renewal Relationship*

	Adjusted R ²	R ² change	F change	sig. F change
Model 4 ^a	.077	.118	2.881	.018
Model 5 ^b	.598	.513	36.076	.000
Model 6 ^c	.615	.025	2.458	.067

* Dependent variable: organizational renewal

^aModel4 predictors: constant, size, age, industry dummy 1,2,3.

^bModel5 predictors: constant, size, age, industry dummy 1,2,3, entrepreneurial posture (EP), support and rewards (SR), work discretion (WD), time availability (TA).

^cModel6 predictors: constant, size, age, industry dummy 1,2,3,EP, SR, WD, TA, EPxSR, EPxWD, EPxTA.

From Table 36 it is also observed that EP and SR affect organizational renewal as independent predictors.

Table 36. Regression Results of Model 5

Model 5	β std.	t values	<i>p</i>
constant		34.833	.000
size	.014	.178	.859
age	.057	.905	.367
industry dummy 1	.114	1.369	.174
industry dummy 2	.009	.107	.915
industry dummy 3	.086	1.258	.211
entrepreneurial posture (EP)	.464	6.051	.000
support and rewards (SR)	.439	5.014	.000
work discretion (WD)	.096	1.546	.125
time availability (TA)	.038	.474	.637

In order to understand which moderator variable caused the significant F change, regression analysis results are analyzed (see Table 37) and it is observed that EP, TA, and EPxWD have significant affect ($p < .1$) on organizational renewal. Accordingly, H15(a), H15(c), H15(d) are rejected, and H15(b) is accepted. The results support that while entrepreneurial posture alone has a very significant ($p < .01$) effect on organizational renewal, the moderating effect of work discretion is also present, supporting only partial moderation.

Table 37. Regression Results of Model 6

Model 6	β std.	t values	<i>p</i>
constant		33.134	.000
size	.078	.856	.394
age	.046	.749	.456
industry dummy 1	-.095	-1.107	.271
industry dummy 2	-.013	-.159	.874
industry dummy 3	-.082	-1.192	.236
entrepreneurial posture (EP)	.462	6.103	.000
support and rewards (SR)	.330	.941	.349
work discretion (WD)	-.004	-.016	.987
time availability (TA)	-.580	-1.666	.099
EPxSR	.105	.274	.785
EPxWD	.672	1.810	.073
EPxTA	.090	.313	.755

Overall, the results of moderated hierarchical regression analyses state that there is no moderation between entrepreneurial posture and innovation/venturing and there is only partial moderation of work discretion between entrepreneurial posture and organizational renewal. Moreover, support and rewards significantly affect innovation/venturing ($p < .01$) and organizational renewal ($p < .01$) as an independent variable.

Discussion

The results of the analysis show that firm-level entrepreneurship is mainly influenced by top management leadership in the organization. When top management leadership effects are analyzed, it is observed that flexibility-oriented leadership has a strong influence on entrepreneurial posture, as expected.

The results of organizational culture affects support that, contrary to expectation, only the hierarchy culture influence entrepreneurial posture in companies. It is hypothesized that the control, accuracy, and formality emphasized by this type of organizational culture would negatively affect entrepreneurial posture in companies. A plausible explanation for the positive influence of hierarchy culture on entrepreneurial posture may be related to the paternalism values dominant in the Turkish business context. In a cross-cultural study, Aycan et al. (2000) found that Turkey scored highest in paternalistic values. Also as supported in the current study, top management leadership is very influential in promoting firm-level entrepreneurship (Ling et al., 2008). The paternalist attitudes of top management

in terms of nurturing effects may be an influencing factor of entrepreneurial posture in hierarchical organizational cultures. In other words, because firm-level entrepreneurship is actually a top management issue in terms decisions regarding new market entry or product line-extension, the existence of a top management which favors entrepreneurship may be a stimulating factor for entrepreneurial posture in the hierarchy culture.

Taken together, the findings on the antecedents of entrepreneurial posture suggest that in the current context of the study, the main predictor of entrepreneurial posture is the existence of a flexibility-oriented top management leadership. This shows that firm-level entrepreneurship is closely dependent on top management. When the priority of top management is efficiency and speed, entrepreneurial capacity of the company is restricted. Having both internal and external orientation with a flexibility emphasis promotes firm-level entrepreneurship. Moreover, the positive influence of hierarchy type of organizational culture suggest firm-level entrepreneurship is more related to top management issues such as strategy, structure and processes as suggested by Covin and Slevin's (1991) conceptual model.

Regarding conceptualization of firm-level entrepreneurship, the study is able to differentiate between entrepreneurial posture and entrepreneurial activities. Wiklund (2006) stated that the combination of current attitudes and past behaviors in Entrepreneurial Posture Scale creates confusion in the field. Through purification the entrepreneurial posture scale in the current study involved only inclination towards entrepreneurship. On the other hand, entrepreneurial activity scale

involved real activities. Accordingly, based on the finding that posture and activities are different from each other and that posture affects the emergence of activities, this study attempts to make a clarification in the constructs. Moreover, the study confirms the literature (Zahra, 1993a; Covin & Miles, 1999) that there are different types of entrepreneurial activities.

The relationship between entrepreneurial activities and organizational performance - especially growth and profitability - is established in the literature (e.g., Antoncic, 2006; Zahra, 1991; Zahra, 1993a; Zahra & Covin, 1995; Zahra & Garvis, 2000). Since a differentiation is made between innovation/venturing and organizational renewal activities their respective effects can be analyzed. It is found that, while organizational renewal have positive effects on both financial and qualitative performance, such a relationship cannot be established with innovation/venturing. Further elaboration on the analysis revealed that, when innovation/venturing is measured only with new product/service introduction and changes in product and service lines items, it has a positive and significant relationship with financial performance. Moreover, the importance of more intangible outcomes of firm-level entrepreneurship is emphasized by Dess et al. (2003) and the current study finds support for the positive effects of organizational renewal on qualitative performance. Together, these findings suggest that, the effect of firm-level entrepreneurship on organizational performance changes depending on how we define firm-level entrepreneurship and organizational performance.

Lastly, the analysis of industry effects suggests that banking industry have

significantly low level of entrepreneurial posture compared to both food and automotive industries and a significantly low level of organization renewal compared to the automotive industry. This results suggest that entrepreneurship in the banking industry is given relatively low priority compared to manufacturing industries (food and automotive).

CHAPTER VI

DISCUSSION ON FINDINGS

In this final chapter, first the findings of qualitative research discussed in Chapter IV and findings of quantitative research discussed in Chapter V are elaborated to observe convergence and divergence patterns. Second, evaluating significance of both research, the overall discussion of findings is presented. The chapter then concludes with the revised theoretical framework of the research.

Qualitative and Quantitative Research Findings

When the qualitative and quantitative research findings are evaluated jointly, a pattern of convergence is observed. The strongest convergence has been observed in the top management leadership effect on firm-level entrepreneurship. It is found that top management leadership is the most important determinant of firm-level entrepreneurship. When the top management gives priority to entrepreneurship then the company is more likely to engage in entrepreneurial activities.

When the effect of organizational culture is considered, both parts of the research indicated that this effect is low compared to the effect of top management leadership on firm-level entrepreneurship. Qualitative research results showed that

organizational culture concept is vague among informants and it is the shared values among organizational members that define organizational culture. Because organizational culture can not clearly be defined when asked directly, its effect on firm-level entrepreneurship cannot be clearly defined either. Quantitative research, on the other hand, showed that the hierarchy culture affects firm-level entrepreneurship, which is most probably related to the dominance of top management in the company that influences firm-level entrepreneurship. The emerging pattern, which is especially strong in the findings of the qualitative part of the research, is that the leader creates the culture, as suggested by Schein (1992). If the leader wants to create an organizational culture that supports entrepreneurship, then the effect of organizational culture on firm-level entrepreneurship becomes highly important.

Both parts of the research pointed to the importance of internal mechanisms as influencing factors of firm-level entrepreneurship. Top management support and rewards/reinforcement emerged as the two important supporting mechanisms. While these organizational factors are initially hypothesized to have a moderating effect between entrepreneurial posture and activities in quantitative research, they emerged as independent influencing factors of firm-level entrepreneurship, which supports the findings of the qualitative part. The strategic orientation of the company such as its growth strategy is also found to be an important influencing factor of firm-level entrepreneurship. This concept is not included in the quantitative part of the research, however it emerged as an important determinant of entrepreneurial activities in the qualitative part.

To sum up, regarding the antecedents of firm-level entrepreneurship, top management leadership is the strongest influencing factor. If the leader creates an organizational culture, develops internal mechanisms and a sense of vision supporting firm-level entrepreneurship, these then become important influencing factors of firm-level entrepreneurship.

The findings of both parts of the research regarding clarification of firm-level entrepreneurship also converge. It is found that innovativeness, proactiveness, and risk-taking are important dimensions of entrepreneurial posture. Although risk-taking dimension cannot be differentiated from proactiveness in the quantitative part, it is still included as an item of proactiveness. Findings of the qualitative part also support the three dimensional structure of the entrepreneurial construct. Results of the quantitative part differentiated between entrepreneurial posture and entrepreneurial activities. Analyses in both parts found that there are *different types* of entrepreneurial activities in the companies. Although the constructs that emerged are not identical, both results found two types of entrepreneurial activities. The first type can be defined as being more internal and this type is labeled as within-boundary focus entrepreneurial activities in the qualitative part and organizational renewal in the quantitative part. The second type is more external and is labeled as beyond-boundary focus entrepreneurial activities in the qualitative part and innovation/venturing in the quantitative part.

Lastly, both parts of the research conclude that entrepreneurial activity affects both financial performance and qualitative performance, but the effect depends on how entrepreneurial activity and how organizational performance are

defined. The qualitative findings suggest that within-boundary focus entrepreneurial activities positively affect both financial and qualitative performance. The quantitative findings also support this by the finding that organizational renewal positively affects both performances. Moreover, qualitative research found a positive effect of beyond-boundary focus entrepreneurial activities on financial performance. Quantitative analysis, on the other hand, did not find a relationship between innovation/venturing and organizational performance.

In conclusion, similar findings in both qualitative and quantitative research suggest that triangulation is mostly achieved in the current research. According to, Denzin (1978) triangulation is “the combination of methodologies in the study of the same phenomenon” (p. 291). The current analysis of firm-level entrepreneurship through a methodology combining case studies and questionnaires enabled the researcher to develop a more holistic understanding of the phenomenon and its organizational level correlates and to develop more justifiable findings.

Discussion of Findings

As the most influential organizational level antecedent of firm-level entrepreneurship, top management leadership is represented as entrepreneurial, visionary, proactive, flexible, customer-focused, hardworking, and courageous which are related more to improvement and to the external orientation of the

organization. The leadership is also found to be emphasizing encouragement, support, empowerment, dominance which are more related to in-group relationships in the organization. These characteristics have a direct effect on the emergence of entrepreneurial activities and an indirect effect through creating an internal environment fostering entrepreneurship in the organization.

The top management leadership characteristics discussed above share similar aspects with transformational leadership. The charisma, emphasis to individualized development, stimulation of intellectual ability, and inspirational communication as components of transformational leadership are critical in organizations which are confronted with forces to change and renewal (Bass, 1990). Therefore, transformational leadership is also essential in developing corporate entrepreneurship.

The shared values among organizational members that affect firm-level entrepreneurship are mainly, self-belief, courage, ambition, and entrepreneurial spirit. Covin and Slevin (1991) discusses organizational culture and top management leadership values and philosophies together as components of internal variables affecting entrepreneurial posture. These shared values are actually reflecting the values of the top management that are diffused among organizational members. Therefore, it is acceptable to state that the values of the leader affect firm-level entrepreneurship through being diffused across the organization. Moreover, a plausible explanation for the finding that the hierarchy type of organizational culture supports firm-level entrepreneurship is the existence of a top management valuing entrepreneurship in such a hierarchical organizational

culture. Although corporate entrepreneurship is more associated with “bounderylessness” than traditional organizations (Dess, Lumpkin & McGee, 1999), the existence of a visionary leader has the power to stimulate and drive entrepreneurial activity in the organization.

The effects of internal mechanisms as influencing factors of firm-level entrepreneurship (Hornsby et al., 1993; Hornsby et al., 2002; Kuratko et al., 1990) is well established in the literature and also found support in the current research. These factors facilitate the participation of organizational members at middle and lower levels of the hierarchy in generating entrepreneurial ideas in the organization.

It is also confirmed that the strategic orientation of the organization influences firm-level entrepreneurship. Zahra (1991) and Covin and Slevin (1991) discuss strategy in terms of the grand strategy, mission, business-level strategy as influencing factors of firm-level entrepreneurship. As Covin and Slevin (1991) suggested when the emphasis is on growth, it is appropriate to expect higher levels of entrepreneurial posture in the organization. Zahra (1991) found that growth orientation is important for both internal and external corporate entrepreneurship activities. While, in general, growth strategy stimulates entrepreneurial activity in the organization, the way a specific strategic orientation differs in its effect on entrepreneurial activity is crucial. It is found that when the strategic orientation is more about business-level growth and market expansion, the entrepreneurial activities are geared towards expansion within the current boundaries of the organization. When the strategic orientation emphasizes more growth oriented expansion in unrelated industries then the entrepreneurial activity is more focused

on diversification.

To sum up, the top management leadership is the main drive behind firm-level entrepreneurship in organizations. When the leader is able / willing to promote entrepreneurial activity in the organization, the strategic orientation, organizational culture, and the internal mechanisms are affected accordingly. These three set of components of internal environment of the organization are parallel to Bartlett and Ghoshal's (1990) organizational elements for strategic innovation: *anatomy* (involves the goals and the formal structure of the organization), *psychology* (involves the shared values, beliefs and norms among organizational members), and *physiology* (involves the system and relationships that enables the flow of information in the organization). As noted by Miles, Heppard, Miles, and Snow (2000) top managers need to construct an organizational architecture that stimulates entrepreneurship in the organization even without their presence. Similarly, three components - hardware (planning, reporting, reward systems), people (personality and character) and software (culture and value system) - are also discussed in Howard (1992) as components of organizational architecture in fostering innovation and change in the organization.

Regarding firm-level entrepreneurship, a distinction is achieved between posture and activities. Entrepreneurial posture represents the disposition toward entrepreneurship as suggested by Wiklund (1999) while entrepreneurial activities involve two main types. The first type involves more internal-oriented entrepreneurial activities. These are internal in the sense that the locus of the entrepreneurial activity is within the company's boundary. These activities usually

involve activities such as innovations in new product development, market expansion, or organizational renewal. Accordingly, they are labeled as within-boundary focus entrepreneurial activities. The second type involves more external-oriented entrepreneurial activities. These are external in the sense that the locus of the entrepreneurial activity transcends the firm's boundary. They involve activities such as joint venture activities, strategic partnerships for product development, or corporate acquisitions in unrelated industries. Accordingly, these activities are labeled as beyond-boundary focus entrepreneurial activities.

The relationship between entrepreneurial activities and organizational performance show an unsteady pattern in the findings. The effect on organizational performance depends on how performance is defined - financial or qualitative - and which entrepreneurial activity is focused on. For qualitative performance, the effects of within-boundary focus entrepreneurial activities are found to be more visible. These activities involve more customer-oriented entrepreneurial initiatives such as new product introduction or more in-group oriented entrepreneurial initiatives such as organizational self-renewal and therefore their effect on qualitative performance are more visible, yet they also positively affect financial performance. On the other hand, the beyond-boundary focus entrepreneurial activity's effects on financial outcome are more visible. Since these activities involve more financial capital investment by the company, their success or failure results in significant changes in the financial structure of the company depending on the scale of investment.

Revised Theoretical Framework

The combined findings of qualitative and quantitative parts of the research resulted in a revision of the preliminary theoretical framework developed in Chapter III. In the revised theoretical framework, top management leadership incorporates dimensions of dominant role (e.g., idea champion), basic orientation (e.g., result-orientation), management style (e.g., supportive), external orientation (e.g., proactive), and internal orientation (e.g., empowering). These dimensions have both direct and indirect effects. They directly affect the emergence of entrepreneurial activities and indirectly affect through creating an organizational architecture that foster firm-level entrepreneurship. The organizational architecture includes the strategic orientation of the company, the organizational culture, and the internal mechanisms. The strategic orientation has dimensions of vision, grand strategy, and the business level strategies. The organizational culture involves the dominant culture, basic values, and the current status of culture (whether it is changing or established). The internal mechanisms are a collection of support from management, tolerance for failure, rewards/reinforcement, idea generation system, and internal communication mechanisms. Firm-level entrepreneurship is conceptualized by differentiating between entrepreneurial posture and entrepreneurial activities. It is suggested that there are two main types of entrepreneurial activities: within-boundary focus (e.g., market expansion) and beyond-boundary focus (e.g., corporate acquisitions) entrepreneurial activities. These entrepreneurial activities in turn affect organizational performance which is

both at financial and qualitative levels. The revised theoretical framework is presented in Fig. 10.

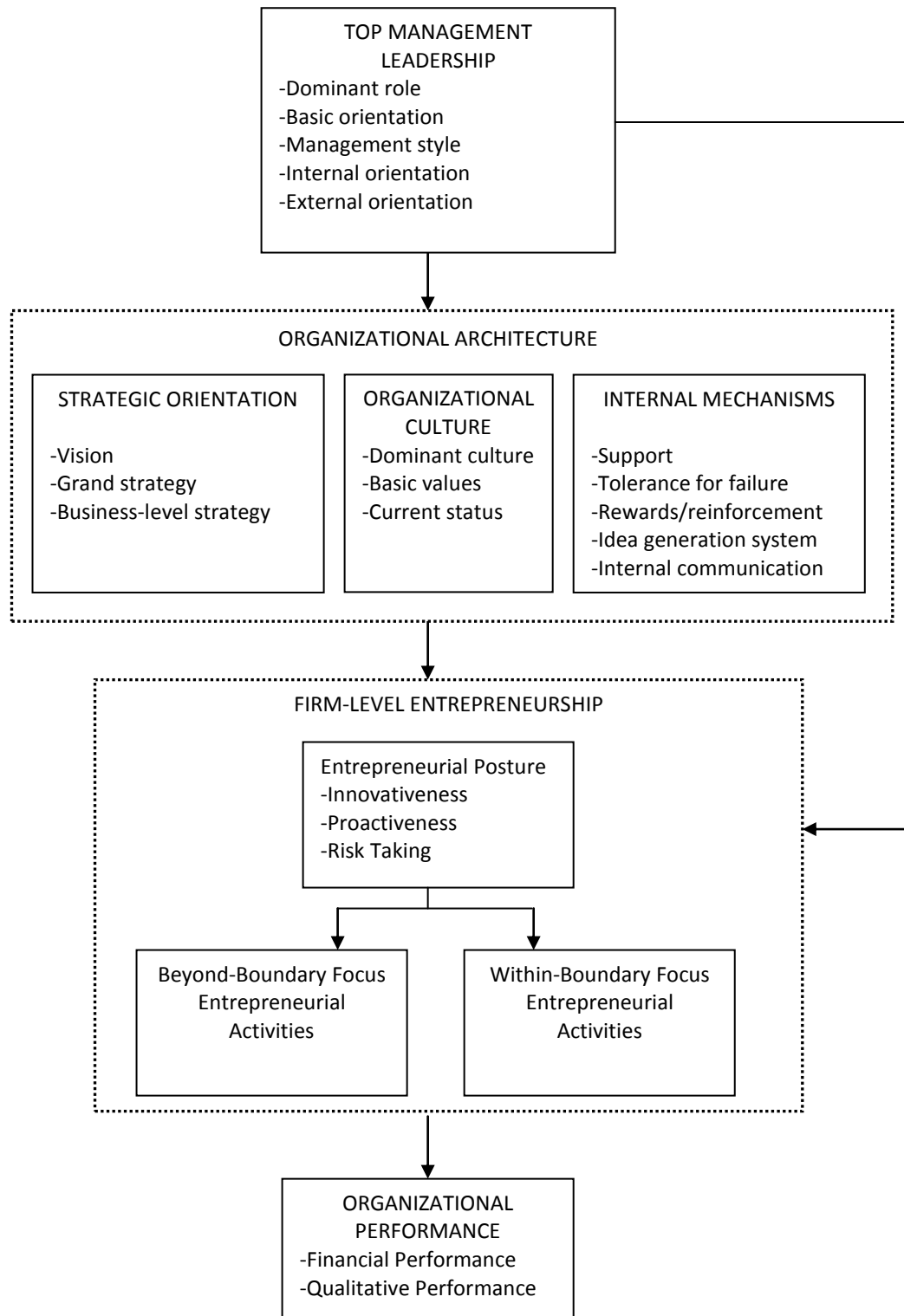


Fig. 10 Revised theoretical framework

CHAPTER VII

CONCLUDING REMARKS

In this concluding chapter, implications to theory and practice and the limitations of the study are discussed followed by the conclusion with future research directions.

Implications

Implications for Theory

Current research aims to clarify the ambiguity in the firm-level entrepreneurship literature. While there are concepts such as entrepreneurial orientation (Miller & Friesen, 1982), corporate entrepreneurship (Guth & Ginsberg, 1990), or strategic entrepreneurship (Ireland et al., 2003) in the literature for studying firm-level entrepreneurship, the field seems to be developing as separate streams. The findings of the qualitative part of this research on firm-level entrepreneurship aim to contribute to the literature through differentiating between two types of entrepreneurial activities in organizations. Moreover, considering that the measures of firm-level entrepreneurship assess different aspects of terms such as

actions, orientations, or attitudes, in quantitative results a differentiation is achieved between posture and activities which aims to clarify the ambiguity surrounding the construct. These categories and differentiations are suggested to serve as steps and tools to reduce the ambiguity present in the field of study.

In addition, there are implications of this research for organizational architecture literature (Tushman & Nadler, 1986). Tushman and Nadler (1986) stated that there are critical factors in the organization for the management of innovation such as the informal organization (e.g., core values, norms), organizational arrangements (e.g., incentives, job rotation), and the individual (e.g., problem solving and team building skills). In more recent studies of corporate entrepreneurship (Dess et al., 1999) the importance of organizational architecture is also stressed. Accordingly, the finding that top management leadership can stimulate entrepreneurial activity in the organization through developing strategic orientation, organizational culture, and internal mechanisms stimulating firm-level entrepreneurship has implications for organizational architecture literature. Moreover, different types of entrepreneurial activities in current research are conceptualized by boundary focus of the companies. The current research also has implications for the boundary-spanning literature (Aldrich & Herker, 1977). Companies can engage in entrepreneurial boundary spanning activities (internal or external) through delegating boundary spanning roles to specific departments or through delegation of responsibility to the whole organization. This research emphasized that, in the context of firm-level entrepreneurship, such decisions depend on the priority given to entrepreneurship by the top management.

Although there are studies that relate leadership and corporate entrepreneurship (Howell & Higgins, 1990; Ling et al., 2008), the literature lacks conceptual models that study firm-level entrepreneurship with its *organizational level* correlates. Ireland et al. (2009) developed an integrative model of corporate entrepreneurial strategy which integrates both external and internal antecedents at both organizational, top management, and organizational member level. This study differs from that of Ireland et al. (2009) in that it takes the firm as its specific level of analysis. The revised theoretical model developed in the current research integrates organizational level factors as antecedents of firm-level entrepreneurship.

Zahra et al. (1999) emphasized the importance of qualitative research to better understand firm-level entrepreneurship with its organizational correlates. Accordingly, the adoption of both qualitative and quantitative analysis aims to develop the field of firm-level entrepreneurship through better understanding the concept and its relationships with organizational level correlates.

Implications for Practice

The competitive environment, increased market opportunities, and the developments in information and communications technologies increased the importance of entrepreneurship in organizations. Managers are highly aware that to survive and excel in the crowded marketplace they need to engage in firm-level entrepreneurship. Accordingly, this research has important implications especially

for top managers. Top managers have the power to affect entrepreneurial activities in their organizations. Certain leadership characteristics (e.g., visionary, courageous, and supportive) are supported in the current research as having an influence on firm-level entrepreneurship. Apart from these characteristics, top managers are in a position to develop an organizational environment favoring entrepreneurship. The strategic orientation of the company should suggest that the company wants to grow and engage in entrepreneurial activities. Moreover, the leader is the creator of the organizational culture and shared norms among organizational members. If entrepreneurship is to be stimulated in the company, then the organizational members should share values that foster entrepreneurial thinking in the organization. This can be achieved through building an organizational culture shared and believed by all the members. Moreover, building support mechanisms in the organization can foster entrepreneurship provided that they work well. There are formally structured idea generation and reward systems in most of the organizations. However, unless these are used effectively by the top management, their power in stimulating entrepreneurship in the organization is weakened.

The finding that there are different entrepreneurial activities in companies with diverse relationship with organizational factors is important for managers for an understanding of the importance of different antecedents that change depending on the entrepreneurial activity. Moreover, the performance implications of different entrepreneurial activity types are also of managerial concern. Qualitative performance (e.g., customer equity) becomes more important due to

increased levels of competition across industries. Accordingly, the positive effects of entrepreneurial activities on qualitative performance provide support for benefits of entrepreneurial activities. Lastly, the positive influence of the entrepreneurial activity on financial performance is also undeniable although it depends on its success.

Limitations

The study is conducted in the Turkish business environment which would narrow the generalizability of the findings. However, the main purpose - especially in the qualitative part of the current study - is not to reach statistical generalization but to ensure analytical generalization through replication of the case study findings. In case studies the major limitation is the number of investigators. Usually, multiple investigators are suggested to be adopted in case studies to increase creativity and confidence in the data (Eisenhardt, 1989). Current study adopts a single investigator - the researcher herself - who acts as both the data collector and the analyzer.

In the focus group studies, the major limitation is the length of the discussions. The minimum requirement is around ninety minutes and only one focus group study exceeded this level. This is mainly because the participants in the groups had time restrictions. Moreover, the number of people in the focus groups is also another limitation. In the current study only two focus groups had the minimum standard (Morgan, 1997).

In the quantitative part, statistical generalization constituted a problem. Moreover, as Zahra et al. (1999) stated, most of the theoretical models empirically studying corporate entrepreneurship are cross-sectional and therefore do not allow to observe the long-term interplay among environmental or organizational variables and corporate entrepreneurship. The current research cannot claim to explain ongoing relationships between constructs since it does not adopt a longitudinal research design. For instance, as Covin and Slevin (1991) implies, there may be reciprocal causality between corporate entrepreneurship and organizational culture. However, in the qualitative part of the study in-depth knowledge about possible causal relationships between these constructs is developed.

Conclusion

In conclusion, this study aims to understand firm-level entrepreneurship with its organizational level relationships of top management leadership, organizational culture, and organizational performance. Initial literature review suggested that top management leadership and organizational culture are predictors of firm-level entrepreneurship which incorporates both orientation towards entrepreneurship and different entrepreneurial activity types which then affects organizational performance.

The study adopts both qualitative and quantitative methods to examine firm-level entrepreneurship and its relationships with a number of constructs. As part of the qualitative research, four case studies are conducted. Two

manufacturing companies (from automotive and food industry) and two service companies (from telecommunications and banking industry) participated in the study. The selection of multiple case sites enables the researcher to develop more generalizable conclusions and better theory development (Eisenhart, 1989).

Although there were many other sources of data such as internal company reports, case site interviews were the main source of data in the case studies. Several interviews are conducted with key informants in the ten month period. In each case study an entrepreneurial story is focused on to understand the process with its organizational correlates. The interviews are finalized when saturation is achieved and the iteration between data and theory provided no further insight. At the end of data analysis, two different types of entrepreneurial activities are found in the companies. The relationship between these two different types of activities and the organizational conduct variables displayed different patterns which led to the development of two conceptual frameworks. In the *beyond-boundary focus entrepreneurial activities framework*, the entrepreneurial activities are external to the current boundaries of the company (i.e., venturing in an unrelated industry). The antecedent of the entrepreneurial activity in this framework is mainly the top management leadership, yet strategic orientation and tolerance for failure as an internal mechanism also have an influence on the activity. The influence of the beyond-boundary entrepreneurial activity is primarily on the financial performance of the company while qualitative performance has minor importance. In the *within-boundary focus entrepreneurial activities framework*, the entrepreneurial activities are internal to the current boundaries of the company (i.e., new product

introduction). The antecedent of the entrepreneurial activity is still top management leadership but in this framework strategic orientation, shared values, and internal mechanisms as antecedents of entrepreneurial activity become more important. In order to ensure the existence of within-boundary focus entrepreneurial activities, top management creates a shared value system among organizational members, develops supportive internal mechanisms, and has a strategic orientation stimulating entrepreneurial activity in the company. The within-boundary focus entrepreneurial activities affect both financial and qualitative performances. The relationships in these two frameworks are then verified by referring to each case.

As part of the quantitative research, a conceptual model is proposed where organizational culture and top management leadership are depicted as independent variables affecting firm-level entrepreneurial process. In addition, firm-level entrepreneurship is analyzed by differentiating between entrepreneurial posture - involving attitudes towards entrepreneurship - and different types of entrepreneurial activities - involving actual behaviors. Overall, organizational culture and top management leadership are suggested to influence entrepreneurial posture which then has an effect on four different types of entrepreneurial activities - innovation/venturing, organizational renewal, strategic renewal, domain redefinition. The relationship between entrepreneurial posture and entrepreneurial activities is suggested to be moderated by certain organizational factors (i.e., management support, work discretion, rewards/reinforcement, time availability, and organizational boundaries). Finally, the effects of these four

different types of activities are analyzed in terms of their effect on firm performance including both tangible and intangible outcomes.

Four semi-structured interviews and four focus groups are conducted for questionnaire item development. The questionnaire developed to test the hypothesized relationships in the conceptual model included items from a priori developed scales in the literature, items generated in focus groups, and items generated by the researcher based on literature review. A pilot test is then conducted and certain revisions are made to the questionnaire. A professional market research company carried out the data collection. Automotive and food industry from manufacturing industry and telecommunications and banking industry from service industry are focused on. The data are collected mostly from multiple respondents in each company. The final sample included 324 respondents from 118 companies.

The results indicate that the most important influencing factor of entrepreneurial posture is flexibility-oriented top management leadership. Among different organizational culture types the hierarchy type of culture is found to have a positive influence on entrepreneurial posture. The analysis shows that entrepreneurial posture and entrepreneurial activities are different constructs of firm-level entrepreneurship where posture affects activities. Moreover, two different types of entrepreneurial activities are identified in the companies - innovation/venturing and organizational renewal. When the effects of these two entrepreneurial activities on financial performance are analyzed, it is found that organizational renewal activities have significant positive influence on both financial

and qualitative performance.

In conclusion, the findings of qualitative and quantitative research suggest that there are different types of entrepreneurial activities in organizations and the most important influencing factor of firm-level entrepreneurship is top management leadership. Organizational culture also has an influence on firm-level entrepreneurship, but the findings of this research suggest that the leader creates an organizational culture which then stimulates entrepreneurial activities in the organization. Internal mechanisms, such as management support has a predictive influence on firm-level entrepreneurship. Moreover, strategic orientation of the company also determines the type of entrepreneurial activity engaged in. With respect to outcomes, firm-level entrepreneurship affects organizational performance but the effect changes depending on the activity and performance indicator.

Overall, the preliminary theoretical framework is revised at the end of data analysis and results. In the revised theoretical framework, top management leadership, as the main determining factor affects firm-level entrepreneurship both directly and indirectly. The indirect effect is through creating an organizational architecture including three main components of strategic orientation, organizational culture, and internal mechanisms supporting firm-level entrepreneurship. Firm-level entrepreneurship involves both entrepreneurial posture and two different activities of beyond-boundary and within-boundary entrepreneurial activities. The firm-level entrepreneurship is then proposed to affect both financial and qualitative performance.

In conclusion, the current research confirmed that firm-level entrepreneurship is influenced by the top management leadership which supports entrepreneurship. The results suggest that the leader either directly affects firm-level entrepreneurship or he/she affects it through developing an organizational architecture - strategic orientation, organizational culture, and internal mechanisms - supporting entrepreneurial activity in the organization. The entrepreneurial activity generally has a positive influence on organizational performance while the relationship changes depending on the type of entrepreneurial activity and performance in consideration.

Regarding different types of entrepreneurial activities in companies, future research can benefit from conducting more in-depth qualitative research for generating a comprehensive list of different entrepreneurial activities in companies. This would enable researchers to identify important common aspects of different activities and thus develop a more comprehensive typology of the concept. Considering the increased importance of social entrepreneurship (Predo & McClean, 2006), future research should also take into consideration more different organizational outcomes such as sustainability. While the processes of encouraging and stimulating entrepreneurial activities in companies need further examination, the sustainability of these activities also merits attention in future research.

APPENDICES

Appendix A

Case Study Interview Protocol

A. Questions regarding the perception of firm-level entrepreneurship in the organization in general:

1. What do you understand from firm-level entrepreneurship?
2. Could you please define firm-level entrepreneurship?
3. What characteristics make you perceive an organization as an entrepreneurial one?
4. Do you think your company is an entrepreneurial company? Why?
5. Does your company engage in firm-level entrepreneurial activities?
6. What kind of firm-level entrepreneurial activities are observed in your company?
7. Could you please explain the different kinds of firm-level entrepreneurial activities in your company?
8. What are the major differences between these different firm-level entrepreneurial activities?
9. How would you define the general atmosphere in your company in

relation to firm-level entrepreneurship?

10. In general what are the attitudes towards firm-level entrepreneurship in your company?

B. Questions regarding the firm-level entrepreneurial activity under investigation:

11. What were the basic intensions behind this firm-level entrepreneurial initiative?

12. How did these intensions turn into real actions? How did the process work out?

a. Who were the idea generators?

b. What was the general company aim?

C. Questions regarding the organizational factors affecting firm-level entrepreneurial activity under investigation:

13. What characteristics of your company promote this firm-level entrepreneurial initiative?

14. Were there any inhibitors external or internal to the company?

15. Did top management provide support for this firm-level entrepreneurial initiative? How?

16. Were you or the major actors in this firm-level entrepreneurial initiative were empowered? How?

17. What kind of reward/reinforcement systems were available in this process?

18. Were you able to spend extra time for idea generation / problem solution etc?

19. How did the organizational boundaries (if any) affect your performance with respect to this firm-level entrepreneurial initiative?

D. Questions regarding the organizational culture affecting firm-level entrepreneurial activity under investigation:

20. How would you define your organizational culture?

21. What was the effect of your organizational culture on this firm-level entrepreneurial initiative?

22. Could you please explain the effect of specific organizational culture characteristics on this firm-level entrepreneurial initiative?

23. How would you define the general management style of your company (fierce competition, freedom etc.) and the effect of it on this firm-level entrepreneurial initiative?

24. How would you define the glue that holds the organization together? How did this affect this firm-level entrepreneurial process?

25. What is the major strategic emphasis in your company that support/hamper this firm-level entrepreneurial initiative?

26. How your organization defines success? Does this perception have any effect on this firm-level entrepreneurial process?

E. Questions regarding the leadership affecting firm-level entrepreneurial activity under investigation:

27. What is the dominant leadership style in your company?

28. What was the role of leadership in this firm-level entrepreneurial process?

29. What kind of support did your leader provide to you in relation to this firm-level entrepreneurial initiative?

30. Would you define your leader as an entrepreneur?

31. Did your leader act as an intrapreneur in this firm-level entrepreneurial process or were there any other intrapreneurs that lead this process?

G. Questions regarding the performance of the company?

32. How did the company sales changed when compared to competitors in the last three years?

33. How did the company profitability changed when compared to competitors in the last three years?

34. How would you define the employees' commitment to the organization?

H. General company information:

37. Industry

38. Age

39. Size

Appendix B
Questionnaire

Dear Respondent,

This questionnaire is an important part of a research conducted at doctoral level in Department of Management, Bogazici University.

The aim is “to measure firm-level entrepreneurship and understand the effects of organizational culture and top management leadership on firm-level entrepreneurial activities”.

Please be sure that confidentiality is ensured and information you provided will only be used for academic purposes. Thank you for your time and consideration.

Deniz Kantur

Bogazici Üniversitesi
Faculty of Economics and Administrative Sciences
Department of Management
Phone: 0212 359 68 12

For your questions:
e-mail: deniz.kantur@boun.edu.tr

1. Please indicate your level of agreement with the following statements that are related to entrepreneurial activities in your organization.

This company...		Strongly disagree	disagree	Neither agree Nor disagree	agree	Strongly agree
1	has marketed many new lines of products and services in the past 5 years.	1	2	3	4	5
2	has made quite dramatic changes in product or service lines.	1	2	3	4	5
3	changed the rules of competitive engagement in its industry.	1	2	3	4	5
4	has made major changes in its growth strategies.	1	2	3	4	5
5	has implemented new business strategies to exploit new product-market opportunities.	1	2	3	4	5
6	has broadened business lines in current industries.	1	2	3	4	5
7	has designated formal idea champions.	1	2	3	4	5
8	has reorganized units and divisions to increase innovation.	1	2	3	4	5
9	has redefined the industries in which it will compete.	1	2	3	4	5
10	has stimulated new demand on existing products in current markets.	1	2	3	4	5
11	has adopted flexible organizational structures to increase innovation.	1	2	3	4	5
12	has moved the competitive battle to a new arena.	1	2	3	4	5
13	has changed its emphasis on creating proprietary technology significantly.	1	2	3	4	5
14	has established procedures to solicit employee ideas for innovation.	1	2	3	4	5
15	has pursued new businesses in new industries that are related to current businesses.	1	2	3	4	5
16	has increased team-work to increase innovation.	1	2	3	4	5
17	has entered new businesses by offering new lines and products.	1	2	3	4	5
18	has revisited its business concept.	1	2	3	4	5
19	has coordinated activities among units to enhance company innovation.	1	2	3	4	5
20	has changed its spending on new product development activities significantly.	1	2	3	4	5
21	has established strategic relationships with co-partners.	1	2	3	4	5
22	has found new niches for its products in current markets.	1	2	3	4	5

2. Please indicate your level of agreement with below statements that describe the top management leadership style in your company?

Top management in my company...		Strongly disagree	disagree	Neither agree Nor disagree	agree	Strongly agree
1	Encourages participation in decision making	1	2	3	4	5
2	Emphasizes showing a hard work ethic	1	2	3	4	5
3	Inspires people to exceed expectations	1	2	3	4	5
4	Emphasizing focusing on competition	1	2	3	4	5
5	Initiates significant change in new projects/programs	1	2	3	4	5
6	Emphasizes developing people	1	2	3	4	5
7	Emphasizes controlling projects	1	2	3	4	5
8	Anticipates customer needs	1	2	3	4	5
9	Emphasizes clarification of policies	1	2	3	4	5
10	Acknowledging personal needs	1	2	3	4	5
11	Expects accurate work	1	2	3	4	5
12	Emphasizes speed	1	2	3	4	5

3. The statements below describe your company's culture. Please rank them from 1 to 4. 1 states that the statement reflects your company's culture most and 4 states that it reflect least.

This company is...

it is like an extended family. People seem to share a lot of themselves.	
a very dynamic and entrepreneurial place. People are willing to take risks.	
very results oriented. A major concern is getting the job done. People are very competitive and achievement oriented.	
a very controlled and structured place. Formal procedures generally govern what people do.	

The leadership in this company is generally considered to exemplify...

mentoring, facilitating, or nurturing.	
entrepreneurship, innovating, or risk taking.	
a aggressive, results-oriented focus.	
coordinating, organizing, or efficiency.	

The management style in this company is characterized by...

teamwork, consensus, and participation.	
individual risk-taking, innovation, freedom, and uniqueness.	
hard-driving competitiveness, high demands, and achievement.	
security of employment, conformity, predictability in relationships.	

The glue that holds the organization together...

loyalty and mutual trust. Commitment to this organization runs high.	
commitment to innovation and development. There is an emphasis on being on the cutting edge.	
the emphasis on achievement and goal accomplishment. Aggressiveness and winning are common themes.	
formal rules and policies. Maintaining a smooth-running organization is important.	

This company emphasizes...

human development. High trust, openness, and participation persist.	
acquiring new resources and creating new challenges. Trying new things and are valued.	
competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.	
permanence and stability. Efficiency, control, and smooth operations are important.	

This company defines success on the basis of...

the development of human resources, teamwork, and employee commitment.	
having the most unique or newest products. It is a product leader and innovator.	
winning in the marketplace and outpacing the competition. Competitive market leadership is key.	
efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.	

4. There are bipolar statements below about your company's entrepreneurial orientation. Please indicate your level of agreement with the statement by choosing a number between 1-7 closer to that statement.

1	In general, the top managers of this company favor a strong emphasis on the marketing of tried and true products or services.	1	2	3	4	5	6	7	In general, the top managers of this company favor a strong emphasis on R&D, technological leadership, and innovations.
2	This company typically seeks to avoid competition clashes, preferring a 'live-and-let-live' posture.	1	2	3	4	5	6	7	This company typically adopts a very competitive 'undo-the-competitors' posture.
3	This company is very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc.	1	2	3	4	5	6	7	This company is very often first business to introduce new products/services, administrative techniques, operating technologies, etc.
4	This company underestimates pioneering technological developments in its industry.	1	2	3	4	5	6	7	This company emphasizes pioneering technological developments in its industry.
5	In general, the top managers of this company have a strong proclivity for low-risk projects (with normal and certain rates of return).	1	2	3	4	5	6	7	In general, the top managers of this company have a strong proclivity for high-risk projects (with chances of very high returns).
6	This company typically responds to actions which competitors initiate.	1	2	3	4	5	6	7	This company typically initiates actions which competitors then respond to.
7	This company underestimates pioneering technological developments in its industry.	1	2	3	4	5	6	7	This company emphasizes pioneering technological developments in its industry.
8	In general the top managers of this company have a strong tendency to 'follow the leader' in introducing new products or ideas.	1	2	3	4	5	6	7	In general the top managers of this company have a strong tendency to be ahead of other competitors in introducing novel ideas or products.
9	This company makes no special effort to take business from the competition.	1	2	3	4	5	6	7	This company is very aggressive and intensely competitive.
10	This company underestimates new product development.	1	2	3	4	5	6	7	This company emphasizes new product development.
11	In general, the top managers of this company believe that owing to the nature of the environment, it is best to explore it gradually via timid, incremental behavior.	1	2	3	4	5	6	7	In general, the top managers of this company believe that owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm's objectives.

5. Please indicate your level of agreement with the below statements that are related to organizational factors in your company.

		Strongly disagree	Disagree	Neither agree Nor disagree	agree	Strongly agree
1	I always seem to have plenty of time to get everything done.	1	2	3	4	5
2	Individual risk takers are often recognized for their willingness to champion new projects, whether eventually successful or not.	1	2	3	4	5
3	I feel that I am always working with time constraints on my job.	1	2	3	4	5
4	People are often encouraged to take calculated risks with new ideas around here.	1	2	3	4	5
5	On my job I have no doubt of what is expected of me.	1	2	3	4	5
6	I have the freedom to decide what I do on my job.	1	2	3	4	5
7	The rewards I receive are dependent upon my work on the job.	1	2	3	4	5
8	My supervisor will give me special recognition if my work performance is especially good.	1	2	3	4	5
9	During the past three months, my work load was too heavy to spend time on developing new ideas.	1	2	3	4	5
10	This organization supports many small and experimental projects realizing that some will undoubtedly fail.	1	2	3	4	5
11	In the past three months, I have always followed standard operating procedures or practices to do my major tasks.	1	2	3	4	5
12	I almost always get to decide what I do on my job.	1	2	3	4	5
13	My manager would tell his boss if my work was outstanding.	1	2	3	4	5
14	I clearly know what level of work performance is expected from me in terms of amount, quality, and timeliness of output.	1	2	3	4	5
15	It is basically my own responsibility to decide how my job gets done.	1	2	3	4	5

6. Please evaluate your company's organizational performance with respect to competitors in taking into regard the last 3 years?

		low	below average	average	above average	high
1	Sales growth	1	2	3	4	5
2	Return on sales	1	2	3	4	5
3	Return on assets	1	2	3	4	5
4	Market share	1	2	3	4	5
5	Ability to introduce new products/services before competitors	1	2	3	4	5
6	Flexible pricing strategies	1	2	3	4	5
7	Product/service design	1	2	3	4	5
8	Product/service quality	1	2	3	4	5
9	Flexibility in product/service introduction	1	2	3	4	5
10	Employee commitment	1	2	3	4	5
11	Employee satisfaction	1	2	3	4	5
12	Qualified personnel	1	2	3	4	5
13	Customer satisfaction	1	2	3	4	5
14	Customer loyalty	1	2	3	4	5
15	Understanding the customer	1	2	3	4	5

7. Please provide information to the below statements about your company demographics.

1	Total number of employees as of today:	
2	Number of years your company is in operation:	
3	Main are of industrial operations:	

Thank you for your time and consideration.

D1. Company Name : _____

D2. Respondent Name: _____

D3. Position in the company : _____

D4. Contact information: _____

Değerli Katılımcı,

Bu anket, Boğaziçi Üniversitesi İşletme Bölümü doktora programı düzeyinde yürütülen bir araştırma projesinin önemli bir parçasıdır.

Amacımız “Kurumsal girişimciliği ölçmek, örgüt kültürü ve liderliğin kurumsal girişimciliğe olan etkisini araştırmaktır.”

Bu çalışmada elde edilecek veriler sadece akademik amaçlı kullanılıp gizli tutulacaktır. Araştırmaya gösterdiğiniz ilgi, yardım ve ayırdığınız zamandan dolayı şimdiden teşekkür ederiz.

Deniz Kantur

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S1. Lütfen kurumunuzdaki girişimci faaliyetler ile ilgili aşağıda sıralanan söylemlere ne derece katıldığınızı 1 ile 5 arası puan vererek belirtir misiniz?

“1” ifadeye kesinlikle katılmadığınız “5” ise ifadeye kesinlikle katıldığınız anlamına gelmektedir. Katılma derecenize göre aradaki puanları da verebilirsiniz.

Bu kurum...		Kesinlikle Katılmıyorum	Katılmıyorum	Ne katılıyorum, ne katılmıyorum	Katılıyorum	Kesinlikle Katılıyorum
1	Son beş yıl içerisinde birçok yeni ürün/hizmet piyasaya sürdü.	1	2	3	4	5
2	Ürün/hizmet hatlarında geniş çaplı değişiklikler yaptı.	1	2	3	4	5
3	Sektöründe rekabetin kurallarını değiştirdi.	1	2	3	4	5
4	Büyüme/küçülme stratejilerinde önemli değişiklikler yaptı.	1	2	3	4	5
5	Yeni fırsatlardan daha iyi yararlanabilmek için yeni stratejiler uygulanmasına önem verdi.	1	2	3	4	5
6	Mevcut sektörlerdeki iş alanlarını genişletti.	1	2	3	4	5
7	Fikir yaratıcılığı için özel pozisyonlar oluşturulmasına önem verdi.	1	2	3	4	5
8	Yeniliklerin artması için yeniden yapılandı.	1	2	3	4	5
9	Rekabet edeceği sektörleri yeniden tanımladı.	1	2	3	4	5
10	Mevcut pazarlardaki mevcut ürünlerine/hizmetlerine yeni talep yarattı.	1	2	3	4	5
11	Yeniliklerin artması için esnek kurumsal bir yapı benimsedi.	1	2	3	4	5
12	Rekabet savaşını yeni bir alana taşıdı.	1	2	3	4	5
13	Teknoloji yaratmayı önemli ölçüde vurguladı.	1	2	3	4	5
14	Çalışanlarını yenilikçi fikirler üretmeye teşvik etmek için prosedürler geliştirildi.	1	2	3	4	5
15	Yeni sektörlerde şu anki iş alanları ile ilgili yeni iş alanları sürdürmeyi hedefledi.	1	2	3	4	5
16	Yeniliklerin artması için takım çalışmasına önem verdi.	1	2	3	4	5
17	Yeni ürün/hizmet kategorileri oluşturarak yeni iş alanlarına girdi.	1	2	3	4	5
18	İş anlayışını yeniden gözden geçirdi.	1	2	3	4	5
19	Yeniliklerin artması için birimler arası faaliyetlerin koordine edilmesine önem verdi.	1	2	3	4	5
20	Yeni ürün/hizmet geliştirme çalışmaları için yaptığı harcamalarını önemli ölçüde değiştirdi.	1	2	3	4	5
21	Stratejik ortaklıklar kurdu.	1	2	3	4	5
22	Mevcut pazarlardaki mevcut ürünlerine/hizmetlerine niş pazarlar bulmayı vurguladı.	1	2	3	4	5

S2. Lütfen kurumunuzdaki tepe yönetiminin liderliği ile ilgili aşağıda sıralanan söylemlere ne derece katıldığınızı belirtir misiniz?

Kurumumuzda tepe yönetimi...		Kesinlikle Katılmıyorum	Katılmıyorum	Ne katılıyorum, ne katılmıyorum	Katılıyorum	Kesinlikle Katılıyorum
1	Çalışanların karar verme süreçlerine katılımını teşvik eder.	1	2	3	4	5
2	Sıkı bir iş disiplinine önem verir.	1	2	3	4	5
3	Çalışanları kendilerinden beklenenin üstünde çalışmalarını için cesaretlendirir.	1	2	3	4	5
4	Rekabet odaklı çalışmayı vurgular.	1	2	3	4	5
5	Yeni proje/program gibi önemli değişikliklerin uygulanmasını teşvik eder.	1	2	3	4	5
6	Çalışanların gelişimine önem verir.	1	2	3	4	5
7	Projelerin kontrol altında tutulmasını vurgular.	1	2	3	4	5
8	Müşterilerin ihtiyaçlarını öngörür.	1	2	3	4	5
9	Kurum prosedürlerinin anlaşılır olmasına önem verir.	1	2	3	4	5
10	Çalışanların kişisel ihtiyaçlarının farkındadır.	1	2	3	4	5
11	Çalışanlarından hatasız ve tam iş bekler.	1	2	3	4	5
12	Hızlı çalışmayı teşvik eder.	1	2	3	4	5

- S3. Aşağıda kurum kültürünüz ile ilgili dörtlü söylemler yer almaktadır. Lütfen bu söylemleri 1'den 4'e doğru sıralayınız.
1 söylemin kurum kültürünü daha çok 4 daha az yansıttığını belirtir.

Bu kurum...

Geniş bir aile gibidir. İnsanlar kendileriyle ilgili birçok şeyi diğerleriyle paylaşırlar.	
Dinamik ve girişimcidir. İnsanlar risk almaya çok isteklidir.	
Sonuç odaklıdır ve işlerin tamamlanmasına çok önem verir. İnsanlar çok rekabetçi ve başarı odaklıdır.	
Denetim altında ve çok yapılandırılmıştır. İşlerin nasıl yapılacağı resmi prosedürler tarafından belirlenir.	

Bu kurumdaki liderlik...

Yol göstericiliği, kolaylaştırmayı ve eğitmeyi destekler.	
Girişimciliği, yenilikçiliği ve risk alma eğilimini destekler.	
Agresiflik ve sonuç odaklı olmayı destekler.	
Koordine etmeyi, örgütlemeyi ve verimliliği destekler.	

Bu kurumdaki yönetim stili...

Takım çalışması, fikir birliği ve katılım ile tanımlanır.	
Kişisel risk alma eğilimi, yenilik, özgürlük ve özgünlük ile tanımlanır.	
Yoğun rekabet, yüksek talepler ve başarı ile tanımlanır.	
Çalışma güvencesi, ilişkilerdeki uyum ve öngörülebilirlik ile tanımlanır.	

Bu kurumu birarada tutan şey...

Sadakət ve karşılıklı güvendir. Kuruma olan bağlılık yüksektir.	
Yeniliğe ve gelişime olan bağlılıktır. En ileri noktada olmaya önem verilir.	
Başarı ve hedeflere ulaşılmasıdır. Agresiflik ve kazanma ortak temalardır.	
Kurallar ve politikalarıdır. Kurumun düzgün bir şekilde çalışmasını sürdürmek önemlidir.	

Bu kurum...

İnsan gelişimini vurgular. Güven, açıklık ve katılım konularında ısrarcıdır.	
Yeni kaynaklar ve yeni fırsatlar yaratılmasını vurgular. Yeni şeyler denenmesine değer verir.	
Rekabetçi hareketleri ve kazanmayı vurgular. Yüksek hedefleri tutturmak ve pazar yerinde kazanmak önemlidir.	
Devamlılığı ve istikrarı vurgular. Verimlilik, kontrol ve işlerin düzgün yürütülmesi önemlidir.	

Bu kurum başarıyı...

İnsan kaynaklarının, takım çalışmasının ve çalışan bağlılığının geliştirilmesi ile tanımlar.	
Yeni ürün geliştirmek ile tanımlar. Tam bir ürün lideri ve yenilikçidir.	
Pazar yerinde rakiplere olan üstünlük ile tanımlar. Rekabete dayalı liderlik çok önemlidir.	
Verimliliğe bağlı olarak tanımlar. Güvenilir dağıtım, düzgün programlama ve az maliyet ile üretim çok önemlidir.	

S4. Aşağıda kurumunuzun girişimciliği ile ilgili farklı tavırlar zıt kutuplar halinde gösterilmiştir. Her tavra ait iki kutup arası yedi farklı bölme ile derecelendirilmiştir. Lütfen her tavra ait sizin düşüncenize uygun olan bölümü işaretleyiniz?

1	Bu kurumun üst düzey yöneticileri genelde denenmiş ve doğrulanmış ürünlerin ve hizmetlerin pazarlanmasını vurgular.	1	2	3	4	5	6	7	Bu kurumun üst düzey yöneticileri genelde araştırma ve geliştirmeyi, teknolojik liderliği ve yenilikleri vurgular.
2	Bu kurum rekabetten uzak durur ve “yaşa ve yaşat” tavrını tercih eder.	1	2	3	4	5	6	7	Bu kurum son derece rekabetçidir ve “rakiplerini yen” tavrını tercih eder.
3	Bu kurum çok nadiren yeni ürün ve hizmetleri, yönetim tekniklerini, işletim sistemlerini ve benzerlerini sunan ilk şirket olur.	1	2	3	4	5	6	7	Bu kurum çok sık yeni ürün ve hizmetleri, yönetim tekniklerini, işletim sistemlerini ve benzerlerini sunan ilk şirket olur.
4	Bu kurum kendi sektöründe teknolojik gelişime öncelik etmeyi önemsemez.	1	2	3	4	5	6	7	Bu kurum kendi sektöründe teknolojik gelişime öncelik etmeyi vurgular.
5	Bu kurumun üst düzey yöneticileri normal ve kesin getirisi olan düşük riskli projeleri destekler.	1	2	3	4	5	6	7	Bu kurumun üst düzey yöneticileri yüksek getiri ihtimali olan yüksek riskli projeleri destekler.
6	Bu kurum genellikle rakipleri tarafından başlatılan faaliyetleri takip eder.	1	2	3	4	5	6	7	Bu kurum genellikle rakipleri tarafından takip edilecek faaliyetleri başlatır.
7	Bu kurum teknolojik yenilikleri önemsemez.	1	2	3	4	5	6	7	Bu kurum teknolojik yenilikleri vurgular.
8	Bu kurumun üst düzey yöneticilerinin yeni ürünlerin ve fikirlerin ortaya sunulması konusunda genelde pazar liderini takip etme eğilimi vardır.	1	2	3	4	5	6	7	Bu kurumun üst düzey yöneticilerinin yeni ürünlerin ve fikirlerin ortaya sunulması konusunda genelde rakiplerin önünde olma eğilimi vardır.
9	Bu kurum rakiplerini geride bırakmak için hiçbir özel çaba sarfetmez.	1	2	3	4	5	6	7	Bu kurum çok agresif ve fazlasıyla rekabetçidir.
10	Bu kurum yeni ürün geliştirilmesini önemsemez.	1	2	3	4	5	6	7	Bu kurum yeni ürün geliştirilmesini vurgular.
11	Bu kurumun üst düzey yöneticileri, çevreden ötürü, en iyisinin çekingen adımlarla aşamalar halinde keşfetmek olduğuna inanır.	1	2	3	4	5	6	7	Bu kurumun üst düzey yöneticileri, çevreden ötürü, firma hedeflerine cesur ve geniş kapsamlı hareketlerle ulaşacağına inanır.

S5. Lütfen kurumunuzdaki iş ortamı ile ilgili aşağıda sıralanan söylemlere ne derece katıldığınızı belirtir misiniz?

		Kesinlikle Katılmıyorum	Katılmıyorum	Ne katılıyorum, ne katılmıyorum	Katılıyorum	Kesinlikle Katılıyorum
1	Her zaman bütün işlerimi tamamlayabilmek için fazla fazla zamanım olur.	1	2	3	4	5
2	Bu kurumda, risk alma eğilimi olan insanlar, sonucu başarılı olan ya da olmayan yeni projeleri savundukları için farkedilirler.	1	2	3	4	5
3	Sürekli zaman sınırlaması içinde çalışmış hissine kapılıyorum.	1	2	3	4	5
4	İnsanlar yeni fikirleri ile ilgili hesaplanmış riskler almaları için cesaretlendirilirler.	1	2	3	4	5
5	Yaptığım iş ile ilgili benden ne beklediği hakkında hiçbir şüphem yoktur.	1	2	3	4	5
6	Kendi işimle ilgili yapmam gereken şeyler hakkında karar verme özgürlüğüm vardır.	1	2	3	4	5
7	Aldığım ödüller başardığım işlere bağlıdır.	1	2	3	4	5
8	İşimi gerçekten iyi yaptığım takdirde yöneticim tarafından tasdik edilirim.	1	2	3	4	5
9	Son üç aydaki iş yoğunluğum yeni fikirler üretmeme fırsat tanımayacak kadar fazlaydı.	1	2	3	4	5
10	Bu kurum, hiç kuşkusuz bazılarının başarısız olacağını bilse de, birçok küçük ve deneysel projeye destek verir.	1	2	3	4	5
11	Son üç ayda, başlıca görevlerimi yerine getirmek için bilinen ve kabul gören yöntemleri kullandım.	1	2	3	4	5
12	İşimle ilgili yapmam gerekenlere her zaman ben karar veririm.	1	2	3	4	5
13	Eğer işimde başarılı olursam yöneticim bunu kendi amiri ile paylaşır.	1	2	3	4	5
14	Benden yaptığım işin miktarı, kalitesi ve zamanlaması açısından ne beklediğini açık bir şekilde bilirim.	1	2	3	4	5
15	İşimin nasıl yapılacağına karar vermek benim sorumluluğumdadır.	1	2	3	4	5

S6. Lütfen son 3 yılı dikkate alarak, rakiplerine kıyasla, kurumunuzu aşağıda belirtilen performans kriterleri açısından değerlendirir misiniz?

	Yetersiz	Ortalamanın Altı	Ortalama	Ortalamanın Üstü	Yüksek	
1	Satışlardaki büyüme	1	2	3	4	5
2	Ciro karlılığı (kar/toplam satışlar)	1	2	3	4	5
3	Aktif karlılığı (kar/toplam varlıklar)	1	2	3	4	5
4	Pazar payı büyüklüğü	1	2	3	4	5
5	Yeni ürün/hizmetleri rakiplerinden önce pazara sunabilme	1	2	3	4	5
6	Etkin ve esnek fiyatlama uygulamaları	1	2	3	4	5
7	Ürün/hizmet tasarımı	1	2	3	4	5
8	Ürün/hizmet kalitesi	1	2	3	4	5
9	Ürün/hizmet geliştirmedeki esneklik	1	2	3	4	5
10	Çalışanların firmaya bağlılığı	1	2	3	4	5
11	Çalışanların işten aldığı tatmin	1	2	3	4	5
12	Kaliteli işgücü	1	2	3	4	5
13	Müşteri memnuniyeti	1	2	3	4	5
14	Müşteri sadakati	1	2	3	4	5
15	Müşteriyi tanıma ve anlama	1	2	3	4	5

S7. Lütfen kurumunuzla ilgili aşağıda belirtilen soruların cevaplarını belirtiniz.

1	Toplam çalışan sayısı	
2	Faaliyette bulunan toplam yıl sayısı	
3	Temel faaliyet gösterdiği sektör	

Cevaplarınızla araştırmaya ayırdığınız zaman ve gösterdiğiniz ilgiden dolayı teşekkür ederiz.

D1. Şirket Adı : _____

D2. Katılımcı Adı : _____

D3. Pozisyonu : _____

D4. Kontak Bilgisi : _____

Appendix C

Table 38. Reliability Statistics of Pilot Study

constructs	A
hierarchy culture	.742
market culture	.889
clan culture	.764
adhocracy culture	.714
control type of leadership	.901
compete type of leadership	.865
collaborate type of leadership	.909
create type of leadership	.911
innovativeness	.834
risk-taking	.747
proactiveness	.867
competitive aggressiveness	.802
innovation/venturing	.933
organizational renewal	.909
strategic renewal	.851
Domain redefinition	.616
management support	.927
work discretion	.823
Rewards/reinforcement	.866
time availability	.703
organizational boundaries	.723
financial performance	.893
qualitative performance	.887

Table 39. Test for Normality

		Kolmogorov -Smirnov Test	
	Items	Statistics	<i>p</i>
1	The organization is a very controlled and structured place...	1.680	.007
2	The leadership is exemplifying coordinating, organizing...	1.276	.077
3	The management style is characterized by security of employment...	1.605	.012
4	The organization emphasizes permanence and stability...	1.425	.034
5	The organization defines success on the basis of efficiency...	1.321	.061
6	The glue that holds the organization together is formal rules...	1.736	.005
7	The organization is very results oriented...	1.152	.141
8	The leadership is exemplifying a no-nonsense, aggressive...	1.520	.020
9	The management style is hard-driving competitiveness...	1.533	.018
10	The organization emphasizes competitive actions...	1.568	.015
11	The organization defines success on the basis of winning...	1.867	.002
12	The glue that holds the organization together is achievement...	1.256	.085
13	The organization is a very personal place...	1.640	.009
14	The leadership is generally exemplified mentoring, facilitating...	1.508	.021
15	The management style is characterized by teamwork, consensus...	1.709	.006
16	The organization emphasizes human development...	1.313	.064
17	The organization defines success on the basis of the development...	1.560	.015
18	The glue that holds the organization together is loyalty...	1.503	.022
19	The organization is a very dynamic and entrepreneurial place...	1.209	.107
20	The leadership is generally exemplifying entrepreneurship...	1.912	.001
21	The management style is characterized by individual risk-taking...	1.005	.264
22	The organization emphasizes acquiring new resources...	1.350	.052
23	The organization defines success by having the most unique...	1.297	.069
24	The glue that holds the organization together is innovation...	1.111	.169
25	Clarifying policies	2.087	.000
26	Expecting accurate work	1.921	.001
27	Controlling projects	1.613	.011
28	Focusing on competition	1.809	.003
29	Showing a hard work ethic	2.134	.000
30	Emphasizing speed	1.586	.013
31	Encouraging participation	1.286	.073
32	Developing people	2.146	.000
33	Acknowledging personal needs	1.477	.025
34	Anticipating customer needs	2.260	.000
35	Initiating significant change	1.743	.005
36	Inspiring people to exceed expectations	1.373	.046
37	In general, the top managers emphasize marketing of tried and true...	1.028	.242
38	My company underestimates new product...	1.338	.056
39	My company underestimates technological...	1.546	.017
40	My company underestimates pioneering technological ...	1.586	.013
41	In general, the top managers have a strong proclivity for low-risk...	.983	.289
42	In general, the top managers believe incremental behavior...	.934	.348
43	My company typically responds to actions which competitors initiate...	1.200	.112
44	My company is very seldom the first business to introduce new...	1.367	.048
45	In general the top managers of my company have a strong tendency...	.996	.275
46	My firm is very aggressive and intensely competitive...	.952	.325
47	My company typically seeks to avoid competition clashes...	1.301	.068
48	My company has marketed no new lines of products or services...	1.509	.021
49	Changes in product or service lines have been mostly of a minor...	1.426	.034
50	My company's spending on new product development activities...	1.211	.106
51	My company's emphasis on creating proprietary technology...	1.644	.009

Table 39. continued

Items	Statistics	P
52 My company has emphasized stimulating new demand...	1.867	.002
53 My company has emphasized broadening business lines...	1.405	.039
54 My company has emphasized pursuing new businesses...	1.260	.084
55 My company has emphasized finding new niches for its products...	.996	.275
56 My company has emphasized entering new businesses...	1.064	.207
57 My company has emphasized reorganizing units...	1.185	.121
58 My company has emphasized coordinated activities...	1.055	.216
59 My company has emphasized adopting flexible...	1.441	.031
60 My company has emphasized establishing procedures...	1.274	.078
61 My company has emphasized designating formal idea champions.	1.060	.211
62 My company has emphasized team-work to increase innovation.	1.624	.010
63 My company has emphasized revisiting its business concept.	1.168	.130
64 My company has emphasized redefining the industries...	1.205	.110
65 My company has emphasized implementing new business...	1.863	.002
66 My company has emphasized establishing strategic relationships...	.989	.282
67 My company has emphasized major changes in its growth strategies.	1.073	.200
68 My company changed the rules of competitive engagement.	1.074	.199
69 My company has moved the competitive battle to a new arena.	1.265	.081
70 Individual risk takers are often recognized for their willingness...	1.355	.051
71 People are often encouraged to take calculated risks...	1.239	.093
72 This organization supports many small and experimental projects...	1.067	.205
73 I have the freedom to decide what I do on my job.	1.266	.081
74 It is basically my own responsibility to decide how my job gets done.	1.320	.061
75 I almost always get to decide what I do on my job.	1.121	.162
76 The rewards I receive are dependent upon my work on the job.	1.403	.039
77 My supervisor will give me special recognition...	2.020	.001
78 My manager would tell his boss if my work was outstanding.	1.486	.024
79 During the past three months, my work load was too heavy...	1.639	.009
80 I always seem to have plenty of time to get everything done.	1.280	.075
81 I feel that I am always working with time constraints on my job.	1.450	.030
82 In the past three months, I have always followed standard...	1.587	.013
83 On my job I have no doubt of what is expected of me.	2.036	.001
84 I clearly know what level of work performance is expected from me...	1.604	.012
85 sales growth	1.500	.022
86 return on sales	1.600	.012
87 return on assets	1.389	.042
88 market share	1.683	.010
89 ability to introduce new products/services before competitors	1.499	.022
90 flexible pricing strategies	1.945	.001
91 product/service design	1.898	.001
92 product/service quality	1.620	.011
93 flexibility in product/service introduction	1.761	.004
94 employee satisfaction	1.376	.045
95 employee commitment	1.371	.047
96 qualified personnel	2.190	.000
97 customer satisfaction	2.371	.000
98 customer loyalty	1.863	.002
99 understanding the customer	2.356	.000
100 size	4.439	.000
101 age	1.809	.003

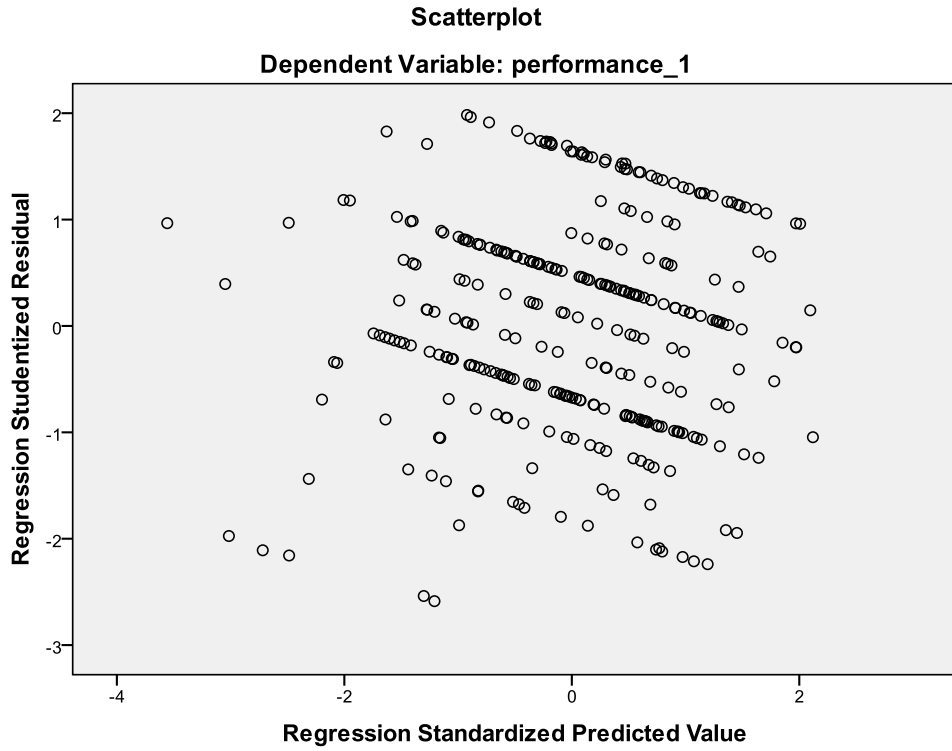


Fig. 11 Scatterplot for linearity check for financial performance

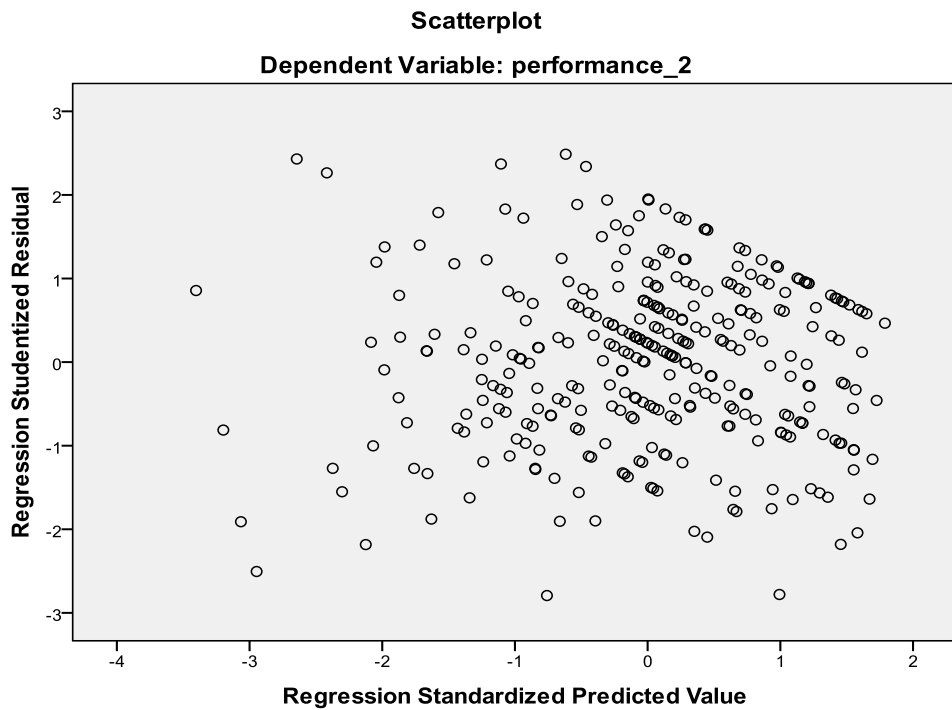


Fig. 12 Scatterplot for linearity check for qualitative performance

Table 40. Homoscedasticity Test

		financial performance	qualitative performance
industry	F	1.597	11.831
	p	.194	.000
size	F	3.921	1.732
	p	.023	.182
age	F	2.291	1.404
	p	.106	.250

Table 41. Multicollinearity Tests

Collinearity Statistics		
	Tolerance	VIF
Hierarchy Culture	.511	1.956
Market Culture	.406	2.462
Clan Culture	.320	3.128
Adhocracy Culture	.539	1.855
Control	.427	2.343
Compete	.427	2.343
Collaborate	.405	2.472
Create	.326	3.068

Table 42. Items in the Analysis

Constructs and items	excluded	loaded on hypothesized construct
No <i>Hierarchy Culture</i>		
1 The organization is a very controlled and structured place...	no	yes
2 The leadership is exemplifying coordinating, organizing...	yes	NA
3 The management style is characterized by security of employment...	yes	NA
4 The organization emphasizes permanence and stability...	no	yes
5 The organization defines success on the basis of efficiency...	yes	NA
6 The glue that holds the organization together is formal rules...	no	yes
<i>Market Culture</i>		
7 The organization is very results oriented...	yes	NA
8 The leadership is exemplifying a no-nonsense, aggressive...	no	yes
9 The management style is hard-driving competitiveness...	no	yes
10 The organization emphasizes competitive actions...	no	yes
11 The organization defines success on the basis of winning...	yes	NA
12 The glue that holds the organization together is achievement...	no	yes
<i>Clan Culture</i>		
13 The organization is a very personal place...	no	yes
14 The leadership is generally exemplified mentoring, facilitating...	no	yes
15 The management style is characterized by teamwork, consensus...	no	yes
16 The organization emphasizes human development...	no	yes
17 The organization defines success on the basis of the development...	yes	NA
18 The glue that holds the organization together is loyalty...	no	yes
<i>Adhocracy Culture</i>		
19 The organization is a very dynamic and entrepreneurial place...	yes	NA
20 The leadership is generally exemplifying entrepreneurship...	yes	NA
21 The management style is characterized by individual risk-taking...	yes	NA
22 The organization emphasizes acquiring new resources...	yes	NA
23 The organization defines success by having the most unique...	yes	NA
24 The glue that holds the organization together is innovation...	yes	NA

Table 42. continued

Constructs and items	excluded	loaded on hypothesized construct
<i>Control</i>		
25 Clarifying policies	yes	NA
26 Expecting accurate work	yes	NA
27 Controlling projects	yes	NA
<i>Compete</i>		
28 Focusing on competition	yes	NA
29 Showing a hard work ethic	yes	NA
30 Emphasizing speed	no	no (speed-oriented leadership)
<i>Collaborate</i>		
31 Encouraging participation	no	no (flexibility-oriented leadership)
32 Developing people	no	no (flexibility-oriented leadership)
33 Acknowledging personal needs	no	no (flexibility-oriented leadership)
<i>Create</i>		
34 Anticipating customer needs	no	no (flexibility-oriented leadership)
35 Initiating significant change	no	no (flexibility-oriented leadership)
36 Inspiring people to exceed expectations	yes	NA

Table 42. continued

Constructs and items	excluded	loaded on hypothesized construct
<i>Innovativeness</i>		
37 In general, the top managers emphasize marketing of tried and true...	yes	NA
38 My company underestimates new product...	no	yes
39 My company underestimates technological...	no	yes
40 My company underestimates pioneering technological ...	no	yes
<i>Risk-taking</i>		
41 In general, the top managers have a strong proclivity for low-risk...	no	no (proactiveness)
42 In general, the top managers believe incremental behavior...	yes	NA
<i>Proactiveness</i>		
43 My company typically responds to actions which competitors initiate...	no	yes
44 My company is very seldom the first business to introduce new...	yes	NA
45 In general the top managers of my company have a strong tendency...	no	yes
<i>Competitiveness Aggressiveness</i>		
46 My firm is very aggressive and intensely competitive...	yes	NA
47 My company typically seeks to avoid competition clashes...	yes	NA

Table 42. continued

Constructs and items	excluded	loaded on hypothesized construct
<i>Innovation / Venturing</i>		
48 My company has marketed no new lines of products or services...	no	yes
49 Changes in product or service lines have been mostly of a minor...	no	yes
50 My company's spending on new product development activities...	no	no (organizational renewal)
51 My company's emphasis on creating proprietary technology...	no	no (organizational renewal)
52 My company has emphasized stimulating new demand...	yes	NA
53 My company has emphasized broadening business lines...	yes	NA
54 My company has emphasized pursuing new businesses...	yes	NA
55 My company has emphasized finding new niches for its products...	yes	NA
56 My company has emphasized entering new businesses...	yes	NA
<i>Organizational renewal</i>		
57 My company has emphasized reorganizing units...	yes	NA
58 My company has emphasized coordinated activities...	no	yes
59 My company has emphasized adopting flexible...	no	yes
60 My company has emphasized establishing procedures...	no	yes
61 My company has emphasized designating formal idea champions.	yes	NA
62 My company has emphasized team-work to increase innovation.	no	yes
<i>Strategic Renewal</i>		
63 My company has emphasized revisiting its business concept.	yes	NA
64 My company has emphasized redefining the industries...	yes	NA
65 My company has emphasized implementing new business...	yes	NA
66 My company has emphasized establishing strategic relationships...	yes	NA
67 My company has emphasized major changes in its growth strategies.	no	no (innovation/venturing)
<i>Domain Redefinition</i>		
68 My company changed the rules of competitive engagement.	no	no (innovation/venturing)
69 My company has moved the competitive battle to a new arena.	yes	NA

Table 42. continued

Constructs and items	excluded	loaded on hypothesized construct
<i>Management Support</i>		
70 Individual risk takers are often recognized for their willingness...	no	yes
71 People are often encouraged to take calculated risks...	no	yes
72 This organization supports many small and experimental projects...	no	yes
<i>Work discretion</i>		
73 I have the freedom to decide what I do on my job.	no	yes
74 It is basically my own responsibility to decide how my job gets done.	no	yes
75 I almost always get to decide what I do on my job.	no	yes
<i>Rewards/reinforcement</i>		
76 The rewards I receive are dependent upon my work on the job.	no	no (management support)
77 My supervisor will give me special recognition...	no	no (management support)
78 My manager would tell his boss if my work was outstanding.	no	no (management support)
<i>Time availability</i>		
79 During the past three months, my work load was too heavy...	yes	NA
80 I always seem to have plenty of time to get everything done.	yes	NA
81 I feel that I am always working with time constraints on my job.	no	yes
<i>Organizational boundaries</i>		
82 In the past three months, I have always followed standard...	yes	NA
83 On my job I have no doubt of what is expected of me.	yes	NA
84 I clearly know what level of work performance is expected from me...	yes	NA

Table 42. continued

Constructs and items	excluded	loaded on hypothesized construct
<i>Financial Performance</i>		
85 sales growth	no	yes
86 return on sales	no	yes
87 return on assets	no	yes
88 market share	yes	NA
89 ability to introduce new products/services before competitors	yes	NA
90 flexible pricing strategies	yes	NA
<i>Qualitative performance</i>		
91 product/service design	no	yes
92 product/service quality	no	yes
93 flexibility in product/service introduction	no	yes
94 employee satisfaction	yes	NA
95 employee commitment	yes	NA
96 qualified personnel	yes	NA
97 customer satisfaction	no	yes
98 customer loyalty	yes	NA
99 understanding the customer	no	yes

Table 43. Constructs and Measures

source	scale	standardized loadings	α
Lawrence et al. (2009)	<i>flexibility-oriented leader</i>		.84
	1 encouraging participation	.67	
	2 initiating significant change	.76	
	3 developing people	.72	
	4 anticipating customer needs	.73	
	5 acknowledging personnel needs	.71	
Zahra (1993a)	<i>innovativeness</i>		.85
	1 pioneering technological development	.87	
	2 emphasizing technological innovation	.86	
	3 emphasizing new product development	.71	
	<i>proactiveness</i>		.84
Covin and Slevin (1989)	1 strong proclivity for high-risky projects	.68	
	2 initiates actions which competitors than respond to	.86	
Lumpkin and Dess (2001)	3 tendency to be ahead of competitors	.85	
	<i>innovation/venturing</i>		.85
Covin and Slevin (1989)	1 introducing new product and service lines	.77	
	2 dramatic changes in product and service lines	.90	
New	3 major changes in growth strategies	.75	
New	4 changed the rules of competition	.67	
	<i>organizational renewal</i>		.91
Zahra (1993a)	1 flexible organizational structures for innovation	.82	
	2 creating propriety technology	.75	
	3 procedure to solicit innovative ideas	.80	
	4 coordination among units to increase coordination	.83	
	5 spending on new product development	.81	
New	6 team-work to increase innovation	.77	
İşeri Say et al. (2008)	<i>financial performance</i>		.93
	1 sales growth	.85	
	2 return on sales	.95	
	3 return on assets	.93	
İşeri Say et al. (2008)	<i>qualitative performance</i>		.90
	1 product/service design	.83	
	2 product/service quality	.81	
	3 flexibility in product/service development	.80	
	4 customer satisfaction	.78	
	5 understanding customer	.76	

Table 44. The Hypotheses Included and Excluded in the Revised Conceptual Model

Hypothesized path	included
H1 hierarchy culture --> entrepreneurial posture	yes
H2 market culture --> entrepreneurial posture	yes
H3 clan culture --> entrepreneurial posture	yes
H4 adhocracy culture --> entrepreneurial posture	no
H5 adhocracy culture > clan and market	no
H6 clan culture > market culture	yes
H7 control leader-->entrepreneurial posture	no
H8 compete leader-->entrepreneurial posture	no
H9 collaborate leader-->entrepreneurial posture	no
H10 create leader-->entrepreneurial posture	no
H11 create leader-->collaborate and compete	no
H12 collaborate leader-->compete leader	no
H22 flexibility-oriented leader-->entrepreneurial posture	new
H23 speed-oriented leader-->entrepreneurial posture	new
H13(a) entrepreneurial posture-->innovation/venturing	yes
H13(b) entrepreneurial posture-->organizational renewal	yes
H13(c) entrepreneurial posture-->strategic renewal	no
H13(d) entrepreneurial posture-->domain redefinition	no
H14(a) moderation of support on H13(a)	yes
H14(b) moderation of work discretion on H13(a)	yes
H14(c) moderation of rewards/reinforcement on H13(a)	yes
H14(d) moderation of time availability on H13(a)	yes
H14(e) moderation of organizational boundaries on H13(a)	no
H15(a) moderation of support on H13(b)	yes
H15(b) moderation of work discretion on H13(b)	yes
H15(c) moderation of rewards/reinforcement on H13(b)	yes
H15(d) moderation of time availability on H13(b)	yes
H15(e) moderation of organizational boundaries on H13(b)	no
H16(a) moderation of support on H13(c)	no
H16(b) moderation of work discretion on H13(c)	no
H16(c) moderation of rewards/reinforcement on H13(c)	no
H16(d) moderation of time availability on H13(c)	no
H16(e) moderation of organizational boundaries on H13(c)	no
H17(a) moderation of support on H13(d)	no
H17(b) moderation of work discretion on H13(d)	no
H17(c) moderation of rewards/reinforcement on H13(d)	no
H17(d) moderation of time availability on H13(d)	no
H17(e) moderation of organizational boundaries on H13(d)	no
H18(a) innovation/venturing-->financial performance	yes
H18(b) innovation/venturing-->qualitative performance	yes
H19(a) organizational renewal-->financial performance	yes
H19(b) organizational renewal-->qualitative performance	yes
H20(a) strategic renewal-->financial performance	no
H20(b) strategic renewal-->qualitative performance	no
H21(a) domain redefinition-->financial performance	no
H21(b) domain redefinition-->qualitative performance	no

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